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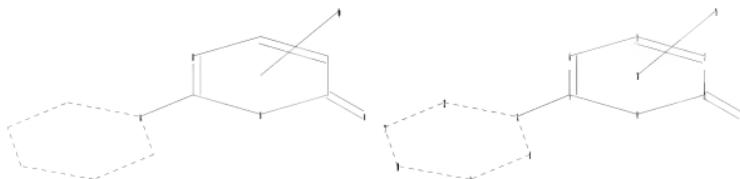
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 14 15
ring nodes :
 1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
 3-14 5-7
ring bonds :
 1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds :
 1-2 1-6 2-3 3-4 3-14 4-5 5-6 5-7 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :
  containing 1 : 7 :

Match level :
 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom
 12:Atom 14:CLASS 15:Atom 16:CLASS
Generic attributes :
 15:
   Saturation          : Unsaturated
   Number of Carbon Atoms : less than 7
   Type of Ring System   : Monocyclic

Element Count :
 Node 15: Limited
  C,C4-5
  N,N1-2
  O,O0
  S,S0

```

=>  
Uploading C:\Program Files\Stnexp\Queries\10538766.str



chain nodes :  
14 15  
ring nodes :  
1 2 3 4 5 6 7 8 9 10 11 12  
chain bonds :  
3-14 5-7  
ring bonds :  
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12  
exact/norm bonds :  
1-2 1-6 2-3 3-4 3-14 4-5 5-6 5-7 7-8 7-12 8-9 9-10 10-11 11-12  
isolated ring systems :  
containing 1 : 7 :

Match level :  
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 14:CLASS 15:Atom 16:CLASS  
Generic attributes :  
15:  
Saturation : Unsaturated  
Number of Carbon Atoms : less than 7  
Type of Ring System : Monocyclic

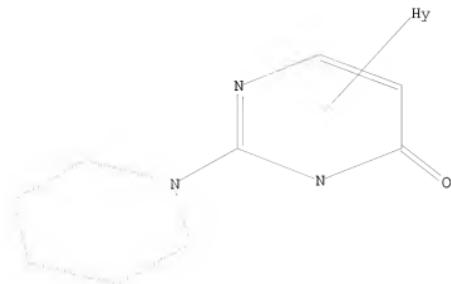
Element Count :  
Node 15: Limited  
C,C4-5  
N,N1-2  
O,O0  
S,S0

L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

L1

STR



Structure attributes must be viewed using STN Express query preparation.

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=> s l1 sss sam
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SAMPLE SCREEN SEARCH COMPLETED - 1676 TO ITERATE
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100.0% PROCESSED	1676 ITERATIONS	15 ANSWERS
SEARCH TIME:	00.00.01	

FULL FILE PROJECTIONS:	ONLINE **COMPLETE**
	BATCH **COMPLETE**
PROJECTED ITERATIONS:	31065 TO 35975
PROJECTED ANSWERS:	68 TO 532

L2 15 SEA SSS SAM L1

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FULL SEARCH INITIATED 20:26:02 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 33196 TO ITERATE
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SEARCH TIME:	00.00.02	

L3 287 SEA SSS FUL L1

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=> => s l3
L4 16 L3
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=> d 14 1-16 bib,ab,hitstr
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L4 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:1204408 CAPLUS  
 DN 147:502387  
 TI Preparation of 2-(cyclic amino)pyrimidone derivatives as tau protein kinase 1 (TPK1) inhibitors  
 IN Fukunaga, Kenji; Kohara, Toshiyuki; Watanabe, Kazutoshi; Usui, Yoshihiro; Uehara, Fumiaki; Yokoshima, Satoshi; Sakai, Daiki; Kusaka, Shin-Ichi; Nakayama, Kazuki  
 PA Mitsubishi Pharma Corporation, Japan; Sanofi-Aventis  
 SO PCT Int. Appl., 325pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007119463	A1	20071025	WO 2007-JP55787	20070314
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	AU 2007239962	A1	20071025	AU 2007-239962	20070314
	CA 2644979	A1	20071025	CA 2007-2644979	20070314
	EP 2001863	A1	20081217	EP 2007-739230	20070314
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR				
	KR 2008102430	A	20081125	KR 2008-724983	20081013
	NO 2008004302	A	20081203	NO 2008-4302	20081014
PRAI	JP 2006-110242	A	20060315		
	WO 2007-JP55787	W	20070314		
OS	MARPAT 147:502387				
AB	The title compds. [I; R4 = cyano, A14-A13-A12; A14 = H, each (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C5-7 cycloalkyl, C3-7 cycloalkenyl, C6-10 aryl, or heterocyclyl; A13 = a bond, O, (un)substituted NH; A12 = a bond, C1-3 alkylene, S, C(O), C(S), S(O)2; X = a bond, O, S, S(O), S(O)2, each (un)substituted CH2 or NH; R5 = H, (un)substituted C1-6 alkyl, (R7)s-A-(CH2)n; n = 0-3; s = 0-5; A = C6-10 aryl or a heterocyclic group; R7 = halo, nitro, cyano, C4-C3-C2-C1-; wherein C4 = H, (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, or C3-7 cycloalkyl, etc.; C3 = a bond, O, S, (un)substituted NH; C2 = a bond, C(O), C(S), S(O); C1 = a bond, C1-5 alkyl, O, S, (un)substituted NH; R6 = halo, nitro, cyano, B14-B13-B12-B11; wherein B14 = H, each (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-7 cycloalkyl, C3-7 cycloalkenyl, C6-10 aryl, or heterocyclyl; B13 = a bond, O, S, (un)substituted NH; B12 = a bond, C(O), C(S), S(O)2; B11 = a bond, C1-3 alkylene, O, S, (un)substituted NH; p = 0-6; Z = N, (un)substituted CH; R2 = H, halo, (un)substituted C1-6 alkyl; R3 = H, each (un)substituted CO-C1-2 alkyl, C2-12 alkenyl, C2-12 alkynyl, C3-12 cycloalkyl, C3-12 cycloalkenyl, C6-10 aryl, or heterocyclyl] or optically active isomers				

thereof, or pharmaceutical acceptable salts thereof are prepared. These compds. are used for the preventive and/or therapeutic treatment of a disease caused by tau protein kinase 1 hyperactivity such as neurodegenerative diseases and other diseases, in particular Alzheimer disease, ischemic cerebrovascular accidents, Down syndrome, cerebral bleeding due to cerebral amyloid angiopathy, progressive supranuclear palsy, subacute sclerosing panencephalitic parkinsonism, postencephalitic parkinsonism, pugilistic encephalitis, Guan parkinsonism-dementia complex, Lewy body disease, Pick's disease, corticobasal degeneration, frontotemporal dementia, vascular dementia, traumatic injuries, brain and spinal cord trauma, peripheral neuropathies, retinopathies, glaucoma, non-insulin dependent diabetes, obesity, manic depressive illness, schizophrenia, alopecia, breast cancer, non-small cell lung carcinoma, thyroid cancer, T or B-cell leukemia, and a virus-induced tumor. Thus, 332 mg 2-chloro-3-methyl-6-pyridin-4-yl-3H-pyrimidin-4-one was added to a solution of 313 mg 1,2,3,6,7,11b-hexahydropyrazino[2,1-a]isoquinolin-4-one and 0.223 mL Et3N in 8 mL DMF and the mixture was stirred for 4 h and stood overnight to give 555 mg 2-(1-methyl-6-oxo-4-pyridin-4-yl-1,6-dihydropyrimidin-2-yl)-1,2,3,6,7,11b-hexahydropyrazino[2,1-a]isoquinolin-4-one (II). The compound (III) showed IC<sub>50</sub> of 1.1 nM for inhibiting P-GS1 phosphorylation by bovine cerebral TPK1. A tablet and a soft capsule formulation containing II were described.

IT 954129-77-2P 954129-78-3P

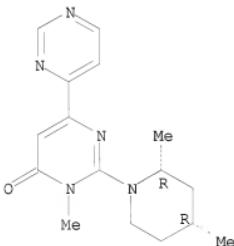
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-(cyclic amino)-pyrimidone derivs. as tpk1 inhibitors for treating or preventing neurodegenerative diseases and other diseases)

RN 954129-77-2 CAPPLUS

CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[(2R,4R)-2,4-dimethyl-1-piperidinyl]-1-methyl-, rel-(-) (CA INDEX NAME)

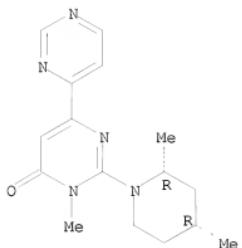
Rotation (-). Absolute stereochemistry unknown.



RN 954129-78-3 CAPPLUS

CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[(2R,4R)-2,4-dimethyl-1-piperidinyl]-1-methyl-, rel-(+)- (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2007:1116734 CAPLUS  
 DN 147:427227  
 TI Method for the preparation of (R)-3-aminopiperidine dihydrochloride  
 IN Wallace, Michael B.; Cody, Jeremy; Fornicola, Richard; Garcia-Rubio,  
 Silvina; Kisanga, Philip B.; Reeve, Maxwell M.; Wilson, Chandra  
 PA Takeda Pharmaceutical Company Limited, Japan  
 SO PCT Int. Appl., 73pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007112368	A1	20071004	WO 2007-US64958	20070326
	W: AE, AG, AL, AM, AP, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, IU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1999108	A1	20081210	EP 2007-759409	20070326
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
PRAI	US 2006-787058P	P	20060328		
	WO 2007-US64958	W	20070326		
OS	CASREACT 147:427227; MARPAT 147:427227				
AB	The invention relates to a process for preparing chiral derivs. of 3-aminopiperidine, including the production of such derivs. in quantities exceeding 1 kg. The method involves esterification of (R)-2,5-diaminopentanoic acid hydrochloride with methanol and acetyl chloride followed by cyclization with sodium methoxide in methanol, and a reaction with hydrochloric acid in Me tert-Bu ether to generate intermediate (R)-3-aminopiperidin-2-one hydrochloride, which undergoes reduction with lithium aluminum hydride in THF at a temperature at least about 35°C to produce (R)-3-aminopiperidine, which is exposed to hydrochloride acid to yield (R)-3-aminopiperidine dihydrochloride (I) with a chiral purity of at least 99%. The process minimizes the need for chiral purification techniques with higher enantiomerically pure I and may apply to a large scale prodn from readily available reagents. I can be used directly in the synthesis of various Dipeptidyl Peptidase IV (DPP-IV) inhibitors without the need to further purify. The invention disclosed the reaction of I with the pyrimidine derivs. II [Q = CO, SO, SO2 or C=NR4, wherein R4 = H, (un)substituted (hetero)(cyclo)alkyl, (hetero)aryl, (hetero)aryalkyl, (hetero)bicycloaryl; R2 and R3 independently = H, NH2, CN, NO2, S, halo, (un)substituted haloalkyl, (hetero)(cyclo)alkyl, etc.; L = linker group; X = CN, OH, (un)substituted (hetero)(cyclo)alkyl, (hetero)aryalkyl, (hetero)bicycloaryl, (hetero)aryl, etc.; Z = leaving group] and III [M0 = -C-LX, N or CR6, wherein R6 = H, halo, perhaloalkyl, etc.; Q1 and Q2 independently = CO, CS, SO, SO2, and C=NR4; R0 = H, CN,				

NH<sub>2</sub>, -LX, with the proviso that only one of R0 and M0 is -LX,  
 (un)substituted (hetero)(cyclo)alkyl, etc.; R5 = H, (hetero)(cyclo)alkyl,  
 (hetero)arylalkyl, etc.; R4, L and X are defined as in II] to synthesize  
 IV and V, which are potential inhibitors of DPP-IV.

IT 844842-93-9P

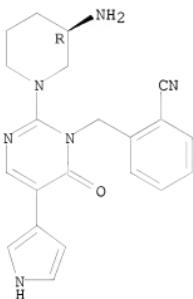
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of chiral pyrimidine compds. with potential DPP-IV inhibitory  
 activity using intermediate chiral aminopiperidine dihydrochloride)

RN 844842-93-9 CAPLUS

CN Benzonitrile, 2-[(2-[(3R)-3-amino-1-piperidinyl]-6-oxo-5-(1H-pyrrol-3-yl)-  
 1(6H)-pyrimidinyl)methyl]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2006:317348 CAPLUS  
 DN 144:370114  
 TI Preparation of pyrimidone derivatives as inhibitors of tau protein kinase 1 for treatment of neurodegenerative diseases  
 IN Watanabe, Kazutoshi; Fukunaga, Kenji; Kohara, Toshiyuki; Uehara, Fumiaki; Hiki, Shinsuke; Yokoshima, Satoshi  
 PA Mitsubishi Pharma Corporation, Japan; Sanofi-Aventis  
 SO PCT Int. Appl., 232 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006036015	A2	20060406	WO 2005-JP18497	20050929
WO 2006036015	A3	20060601		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005288045	A1	20060406	AU 2005-288045	20050929
AU 2005288045	A2	20080529		
CA 2581179	A1	20060406	CA 2005-2581179	20050929
EP 1805164	A2	20070711	EP 2005-790292	20050929
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101048397	A	20071003	CN 2005-80033025	20050929
JP 2008514587	T	20080508	JP 2007-533116	20050929
BR 2005015851	A	20080812	BR 2005-15851	20050929
MX 2007003722	A	20070523	MX 2007-3722	20070328
KR 2007057931	A	20070607	KR 2007-708236	20070411
NO 2007002214	A	20070612	NO 2007-2214	20070427
IN 2007CN01835	A	20070831	IN 2007-CN1835	20070430
PRAI JP 2004-313115	A	20040929		
WO 2005-JP18497	W	20050929		
OS CASREACT 144:370114; MARPAT 144:370114				
AB The title compds. I [wherein R1 = (un)substituted alkyl; R2 = H, halo, or (un)substituted alkyl; R3 and R4 = independently OH, halo, NO <sub>2</sub> , CN, etc.; R5 = H, (un)substituted aryl, or heteroaryl; X = O, NH, or the like; p = 0-7; q = 1-4] or optically active isomers, or pharmaceutically acceptable salts thereof were prepared as inhibitors of tau protein kinase 1 (TPK1) for the treatment of neurodegenerative diseases (e.g. Alzheimer disease). For example, the compound II was prepared in a multi-step synthesis. II inhibited TPK1 with IC <sub>50</sub> of 0.27 nM. Formulations containing I as an active ingredient were described.				
IT 881916-81-0P 881916-82-1P 881916-84-3P				
881916-87-6P 881916-99-0P 881917-31-3P				
881917-32-4P 881917-33-5P 881917-34-6P				

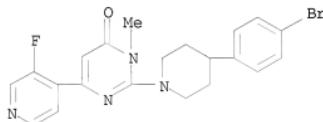
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 881917-80-2P 881917-81-3P 881917-82-4P  
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 881919-53-5P 881919-54-6P 881919-55-7P  
 881919-56-8P 881919-58-0P 881919-60-4P  
 881919-62-6P 881922-10-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyrimidone derivs. as inhibitors of tau protein kinase 1 for treatment of neurodegenerative diseases)

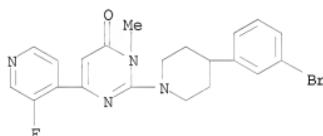
RN 881916-81-0 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[4-(4-bromophenyl)-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



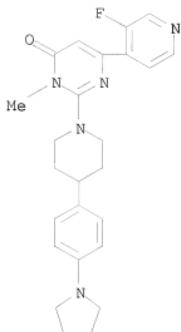
RN 881916-82-1 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[4-(3-bromophenyl)-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)

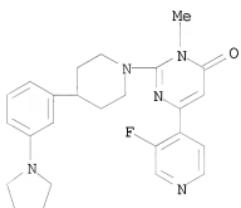


RN 881916-84-3 CAPLUS

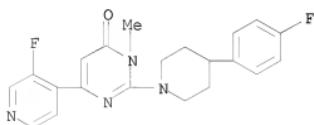
CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[4-[4-(1-pyrrolidinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)



RN 881916-87-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[4-(3-(1-pyrrolidinyl)phenyl)-1-piperidinyl]- (CA INDEX NAME)

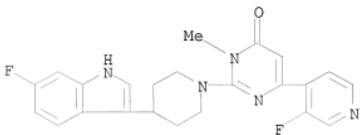


RN 881916-99-0 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(4-fluorophenyl)-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



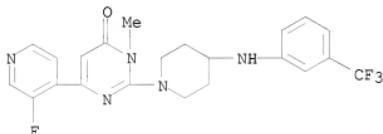
RN 881917-31-3 CAPLUS  
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fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



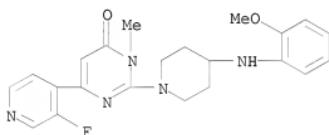
RN 881917-32-4 CAPLUS

CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[4-[(3-trifluoromethyl)phenyl]amino]- (CA INDEX NAME)



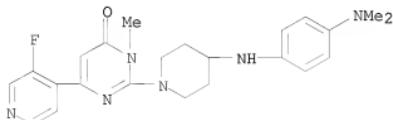
RN 881917-33-5 CAPLUS

CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[4-[(2-methoxyphenyl)amino]-1-piperidinyl]-3-methyl- (CA INDEX NAME)

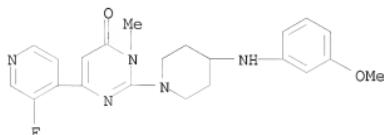


RN 881917-34-6 CAPLUS

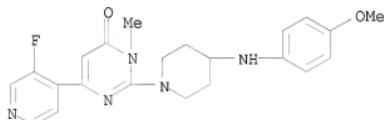
CN 4(3H)-Pyrimidinone, 2-[4-[(4-dimethylaminophenyl)amino]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



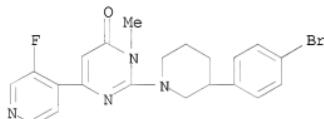
RN 881917-35-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[4-[(3-methoxyphenyl)amino]-1-piperidinyl]-3-methyl- (CA INDEX NAME)



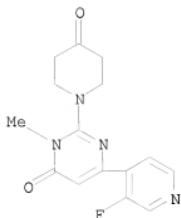
RN 881917-36-8 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[4-[(4-methoxyphenyl)amino]-1-piperidinyl]-3-methyl- (CA INDEX NAME)



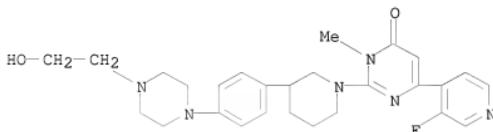
RN 881917-43-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-(4-bromophenyl)-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



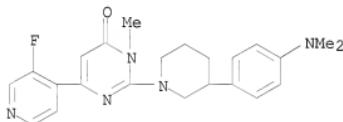
RN 881917-49-3 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-(4-oxo-1-piperidinyl)- (CA INDEX NAME)



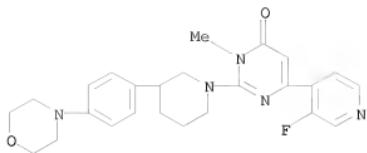
RN 881917-51-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[3-[4-[4-(2-hydroxyethyl)-1-piperazinyl]phenyl]-1-piperidinyl]-3-methyl- (CA INDEX NAME)



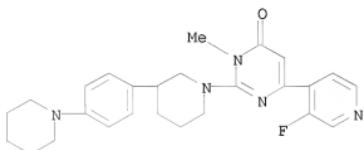
RN 881917-52-8 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(dimethylamino)phenyl]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



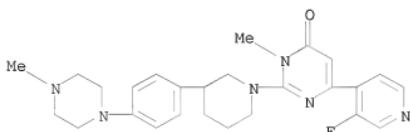
RN 881917-53-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[3-[4-(4-morpholinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)



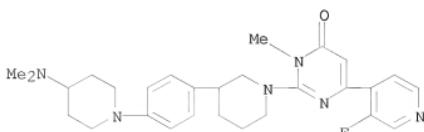
RN 881917-54-0 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[3-[4-(1-piperidinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)



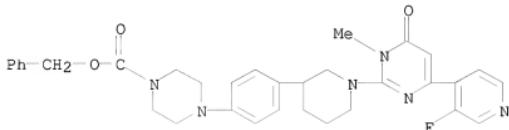
RN 881917-55-1 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[3-[4-(4-methyl-1-piperazinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)



RN 881917-56-2 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(dimethylamino)-1-piperidinyl]phenyl]-1-piperidinyl-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)

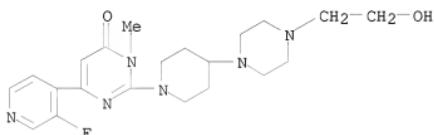


RN 881917-57-3 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[4-[1-[4-(3-fluoro-4-pyridinyl)-1,6-dihydro-1-methyl-6-oxo-2-pyrimidinyl]-3-piperidinyl]phenyl]-, phenylmethyl ester  
(CA INDEX NAME)

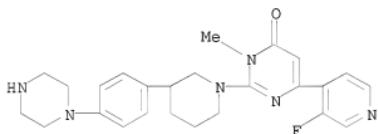
RN 881917-59-5 CAPLUS

CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[4-[4-(2-hydroxyethyl)-1-piperazinyl]-1-piperidinyl]-3-methyl- (CA INDEX NAME)



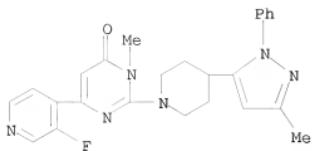
RN 881917-60-8 CAPLUS

CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[3-[4-(1-piperazinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

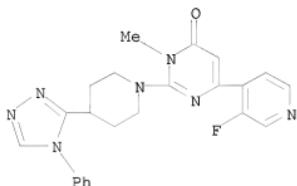


RN 881917-69-7 CAPLUS

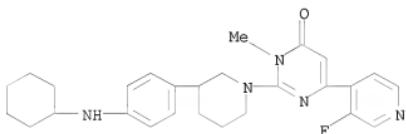
CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[4-(3-methyl-1-phenyl-1H-pyrazol-5-yl)-1-piperidinyl]- (CA INDEX NAME)



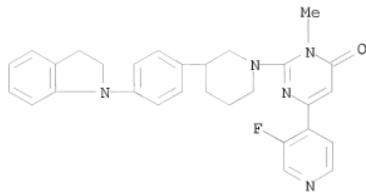
RN 881917-70-0 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[4-(4-phenyl-4H-1,2,4-triazol-3-yl)-1-piperidinyl]- (CA INDEX NAME)



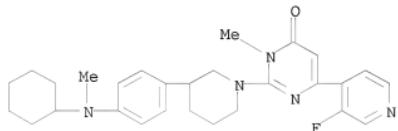
RN 881917-80-2 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(cyclohexylamino)phenyl]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



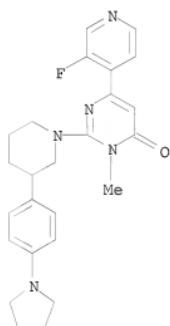
RN 881917-81-3 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(2,3-dihydro-1H-indol-1-yl)phenyl]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



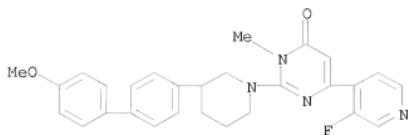
RN 881917-82-4 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(cyclohexylmethylamino)phenyl]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



RN 881918-75-8 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[3-[4-(1-pyrrolidinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)



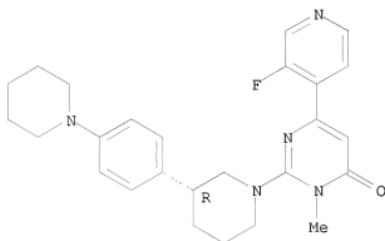
RN 881918-76-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[3-(4'-methoxy[1,1'biphenyl]-4-yl)-1-piperidinyl]-3-methyl- (CA INDEX NAME)



RN 881919-02-4 CAPLUS

CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[(3R)-3-(4-(1-piperidinyl)phenyl)-1-piperidinyl]- (CA INDEX NAME)

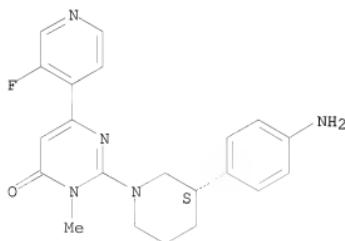
Absolute stereochemistry.



RN 881919-15-9 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[(3S)-3-(4-aminophenyl)-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)

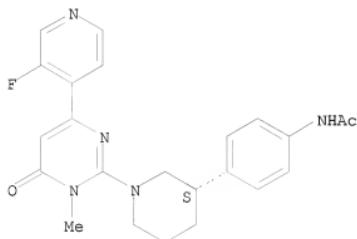
Absolute stereochemistry.



RN 881919-16-0 CAPLUS

CN Acetamide, N-[4-[(3S)-1-[4-(3-fluoro-4-pyridinyl)-1,6-dihydro-1-methyl-6-oxo-2-pyrimidinyl]-3-piperidinyl]phenyl]- (CA INDEX NAME)

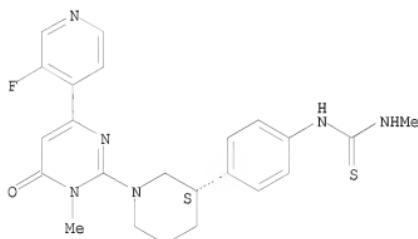
Absolute stereochemistry.



RN 881919-17-1 CAPLUS

CN Thiourea, N-[4-[(3S)-1-[4-(3-fluoro-4-pyridinyl)-1,6-dihydro-1-methyl-6-oxo-2-pyrimidinyl]-3-piperidinyl]phenyl]-N'-methyl- (CA INDEX NAME)

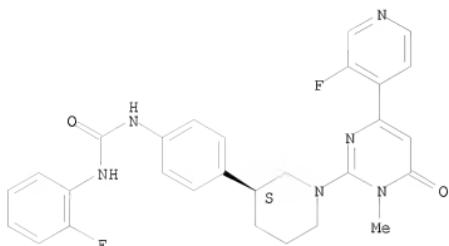
Absolute stereochemistry.



RN 881919-18-2 CAPLUS

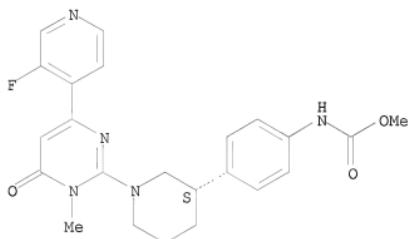
CN Urea, N-(2-fluorophenyl)-N'-(4-[(3S)-1-[4-(3-fluoro-4-pyridinyl)-1,6-dihydro-1-methyl-6-oxo-2-pyrimidinyl]-3-piperidinyl]phenyl)- (CA INDEX NAME)

Absolute stereochemistry.



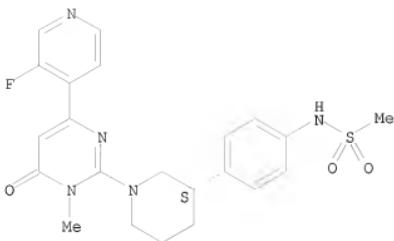
RN 881919-19-3 CAPLUS  
 CN Carbamic acid, [4-[(3S)-1-[4-(3-fluoro-4-pyridinyl)-1,6-dihydro-1-methyl-6-oxo-2-pyrimidinyl]-3-piperidinyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 881919-20-6 CAPLUS  
 CN Methanesulfonamide, N-[4-[(3S)-1-[4-(3-fluoro-4-pyridinyl)-1,6-dihydro-1-methyl-6-oxo-2-pyrimidinyl]-3-piperidinyl]phenyl]- (CA INDEX NAME)

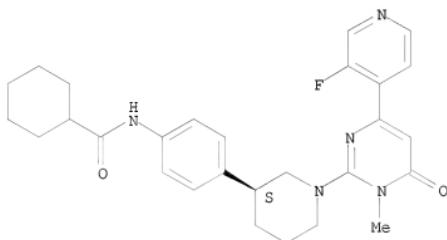
Absolute stereochemistry.



RN 881919-21-7 CAPLUS

CN Cyclohexanecarboxamide, N-[4-[(3S)-1-[4-(3-fluoro-4-pyridinyl)-1,6-dihydro-1-methyl-6-oxo-2-pyrimidinyl]-3-piperidinyl]phenyl]- (CA INDEX NAME)

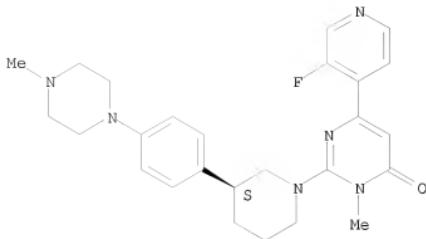
Absolute stereochemistry.



RN 881919-22-8 CAPLUS

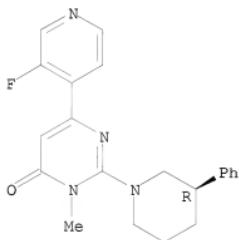
CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[(3S)-3-[(4-methyl-1-piperazinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

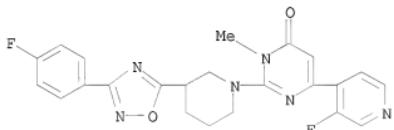


RN 881919-25-1 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[(3R)-3-phenyl-1-piperidinyl]- (CA INDEX NAME)

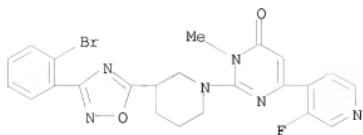
Absolute stereochemistry.



RN 881919-53-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[3-(4-fluorophenyl)-1,2,4-oxadiazol-5-yl]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)

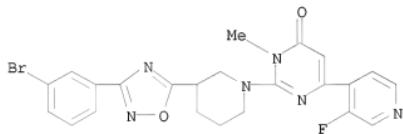


RN 881919-54-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[3-(2-bromophenyl)-1,2,4-oxadiazol-5-yl]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



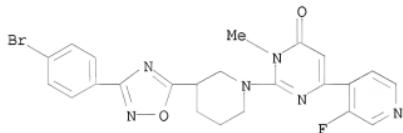
RN 881919-55-7 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[3-[3-(3-bromophenyl)-1,2,4-oxadiazol-5-yl]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)



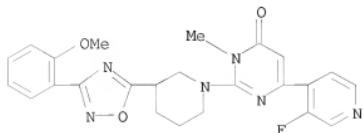
RN 881919-56-8 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[3-[3-(4-bromophenyl)-1,2,4-oxadiazol-5-yl]-1-piperidinyl]-6-(3-fluoro-4-pyridinyl)-3-methyl- (CA INDEX NAME)

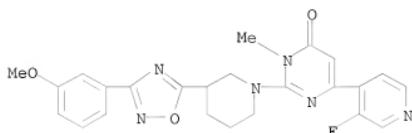


RN 881919-58-0 CAPLUS

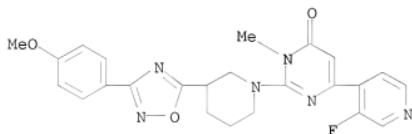
CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[3-[3-(2-methoxyphenyl)-1,2,4-oxadiazol-5-yl]-1-piperidinyl]-3-methyl- (CA INDEX NAME)



RN 881919-60-4 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[3-[3-(3-methoxyphenyl)-1,2,4-oxadiazol-5-yl]-1-piperidinyl]-3-methyl- (CA INDEX NAME)

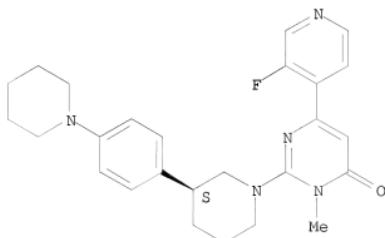


RN 881919-62-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-2-[3-[3-(4-methoxyphenyl)-1,2,4-oxadiazol-5-yl]-1-piperidinyl]-3-methyl- (CA INDEX NAME)



RN 881922-10-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 6-(3-fluoro-4-pyridinyl)-3-methyl-2-[(3S)-3-[4-(1-piperidinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2005:135412 CAPLUS  
 DN 142:240442  
 TI Preparation of pyrimidinones as dipeptidyl peptidase IV (DPP-IV)  
 inhibitors  
 IN Feng, Jun; Gwaltney, Stephen L., II; Kaldor, Stephen W.; Stafford, Jeffrey  
 A.; Wallace, Michael B.; Zhang, Zhiyuan  
 PA Syrrx, Inc., USA  
 SO Eur. Pat. Appl., 102 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1506967	A1	20050216	EP 2004-254864	20040812
	EP 1506967	B1	20071121		
	R: AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
AU	2004265341	A1	20050224	AU 2004-265341	20040812
CA	2535619	A1	20050224	CA 2004-2535619	20040812
WO	2005016911	A1	20050224	WO 2004-US26265	20040812
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US	20050065148	A1	20050324	US 2004-918318	20040812
US	20050070530	A1	20050331	US 2004-917955	20040812
US	7470700	B2	20081230		
US	20050070531	A1	20050331	US 2004-918186	20040812
US	20050070535	A1	20050331	US 2004-918317	20040812
US	20050070706	A1	20050331	US 2004-918326	20040812
US	20050075330	A1	20050407	US 2004-918327	20040812
BR	2004013452	A	20061017	BR 2004-13452	20040812
CN	1867560	A	20061122	CN 2004-80030005	20040812
EP	1911754	A1	20080416	EP 2007-22416	20040812
	R: AI, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, HR, LT, LV, MK				
JP	2005060401	A	20050310	JP 2004-263071	20040813
MX	2006001601	A	20060825	MX 2006-1601	20060209
KR	2006041309	A	20060511	KR 2006-703037	20060213
IN	2006KN00564	A	20070803	IN 2006-KN564	20060309
NO	2006001157	A	20060511	NO 2006-1157	20060310
PRAI	US 2003-495238P	P	20030813		
	EP 2004-254864	A3	20040812		
	WO 2004-US26265	W	20040812		
OS	CASREACT 142:240442; MARPAT 142:240442				
AB	Title compds. (I; Q = CO, SO, SO <sub>2</sub> , C:NR4; Z = halo, perhaloalkyl, amino, cyano, (substituted) alkyl, cycloalkyl, aryl, heteroaryl, alkylcarbonyl, etc.; R <sub>2</sub> , R <sub>3</sub> = H, halo, perhaloalkyl, amino, cyano, NO <sub>2</sub> , SH, (substituted)				

alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, aralkyl, heteroarylalkyl, aryl, heteroaryl, etc.; R4 = H, (substituted) alkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl, bicycloaryl, heterobicycloaryl; L = 0-6 atom linker; X = OH, (substituted) alkyl, cycloalkyl, heterocycloalkyl, aralkyl, heteroaralkyl, bicycloaryl, heterobicycloaryl, alkylcarbonyl, alkylthiocarbonyl, alkylsulfinyl, aryl, heteroaryl, alkoxy, aryloxy, heteroaryloxy, alkenyl, alkynyl, etc.], were prepared. Thus, 2-(5-bromo-2-chloro-6-oxo-6H-pyrimidin-1-ylmethyl)benzonitrile (preparation given), (R)-3-aminopiperidine dihydrochloride, and NaHCO<sub>3</sub> were stirred together for 90 min. in EtOH to give 62% 2-[2-(3-aminopiperidin-1-yl)-5-bromo-6-oxo-6H-pyrimidin-1-ylmethyl]benzonitrile. I inhibited DPP-IV with Ki = 10<sup>-9</sup> M to 10<sup>-5</sup> M.

IT 844842-93-9P

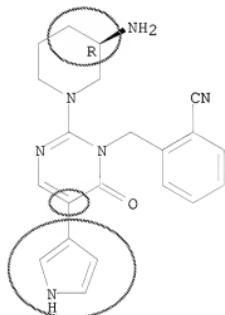
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of pyrimidinones as dipeptidyl peptidase IV inhibitors)

RN 844842-93-9 CAPLUS

CN Benzonitrile, 2-[2-[(3R)-3-amino-1-piperidinyl]-6-oxo-5-(1H-pyrrol-3-yl)-1(6H)-pyrimidinyl]methyl] - (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2004:817871 CAPLUS  
 DN 141:332207  
 TI Preparation of 2,3,6-trisubstituted-4-pyrimidones as tau protein kinase 1 inhibitors

IN Watanabe, Kazutoshi; Uehara, Fumiaki; Hiki, Shinsuke; Yokoshima, Satoshi;  
Usui, Yoshihiro; Okuyama, Masahiro; Shoda, Aya; Aritomo, Keiichi; Kohara,  
 Toshiyuki; Fukunaga, Kenji

PA Mitsubishi Pharma Corporation, Japan; Sanofi-Synthelabo  
 SO PCT Int. Appl., 433 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

**common inventor**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004085408	A1	20041007	WO 2004-JP4320	20040326
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004223987	A1	20041007	AU 2004-223987	20040326
CA 2520027	A1	20041007	CA 2004-2520027	20040326
EP 1608630	A1	20051228	EP 2004-723777	20040326
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004009042	A	20060328	BR 2004-9042	20040326
CN 1764650	A	20060426	CN 2004-80008065	20040326
JP 2006521370	T	20060921	JP 2006-507692	20040326
NZ 543096	A	20080731	NZ 2004-543096	20040326
MX 2005010323	A	20061207	MX 2005-10323	20050923
NO 2005004952	A	20051025	NO 2005-4952	20051025
IN 2005CN02772	A	20070608	IN 2005-CN2772	20051026
US 20060252768	A1	20061109	US 2006-550299	20060531
US 7504411	B2	20090317	<b>contains piperidine as compared to dihydro-pyridine in the claims</b>	
PRAI JP 2003-126021	A	20030326		
JP 2003-126022	A	20030326		
WO 2004-JP4320	W	20040326		

OS MARPAT 141:332207

AB The title compds. I [Q = CH, N; R = (un)substituted alkyl; A represents piperazine ring or piperidine ring; each X = alkyl, optionally partially hydrogenated aryl ring, indan ring or the like; m = 1-3; each Y = halo, OH, CN, alkyl or the like; n = 0-8; when X and Y or two Y groups are attached to the same carbon atom, they may combine to each other to form a C2-C6 alkylene group; and their salts] having tau protein kinase 1 inhibitory and therefore useful for preventive and/or therapeutic treatment of diseases such as neurodegenerative diseases (e.g., Alzheimer disease), were prepared and formulated. E.g., a multi-step synthesis of II.2HCl (starting from 2-bromo-5-fluoroanisole), was given. The biol. data (IC50 values against P-GS1 phosphorylation by bovine cerebral TPK1)

were given for representative compds. I.

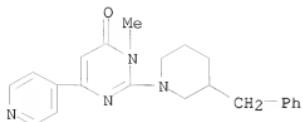
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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

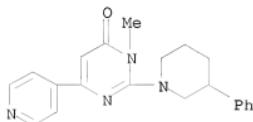
(preparation of 2,3,6-trisubstituted-4-pyrimidones as tau protein kinase 1 inhibitors for treatment and/or prevention of neurodegenerative diseases)

RN 769942-18-9 CAPLUS

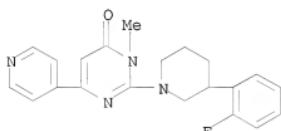
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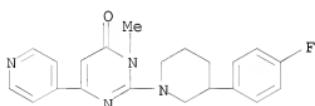
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 (CA INDEX NAME)



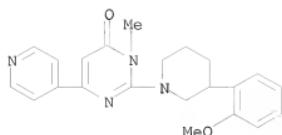
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 (CA INDEX NAME)



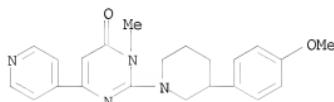
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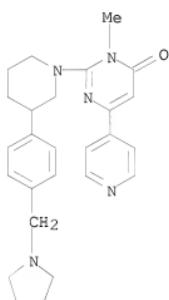
RN 769942-22-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-(2-methoxyphenyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)-  
 (CA INDEX NAME)



RN 769942-23-6 CAPLUS  
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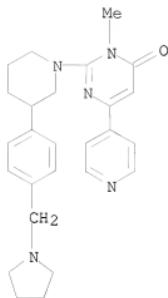
RN 769942-24-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[3-[4-(1-pyrrolidinylmethyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)



RN 769942-25-8 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[3-[4-(1-pyrrolidinylmethyl)phenyl]-1-piperidinyl]-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 769942-24-7  
 CMF C26 H31 N5 O



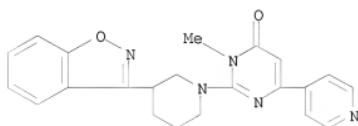
CM 2

CRN 110-17-8  
CMF C<sub>4</sub> H<sub>4</sub> O<sub>4</sub>

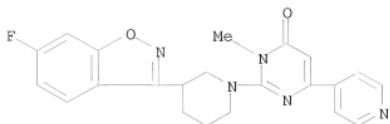
Double bond geometry as shown.



RN 769942-26-9 CAPLUS  
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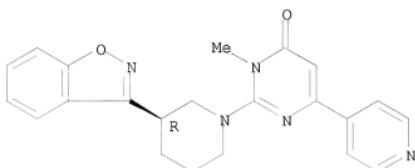
RN 769942-27-0 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-28-1 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[(3R)-3-(1,2-benzisoxazol-3-yl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

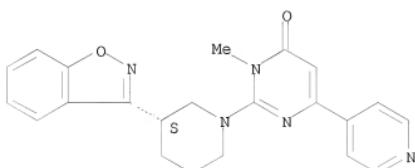
Absolute stereochemistry.



RN 769942-29-2 CAPLUS

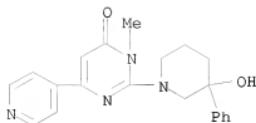
CN 4(3H)-Pyrimidinone, 2-[(3S)-3-(1,2-benzisoxazol-3-yl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

Absolute stereochemistry.

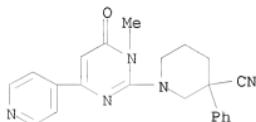


RN 769942-30-5 CAPLUS

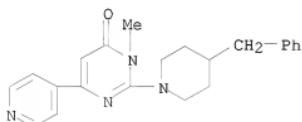
CN 4(3H)-Pyrimidinone, 2-(3-hydroxy-3-phenyl-1-piperidinyl)-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



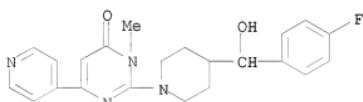
RN 769942-31-6 CAPLUS  
 CN 3-Piperidinecarbonitrile, 1-[1,6-dihydro-1-methyl-6-oxo-4-(4-pyridinyl)-2-pyrimidinyl]-3-phenyl- (CA INDEX NAME)



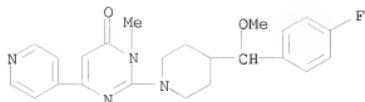
RN 769942-32-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-2-[4-(phenylmethyl)-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



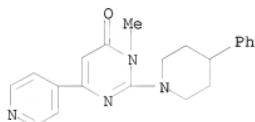
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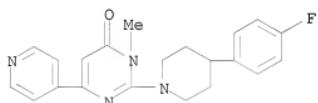
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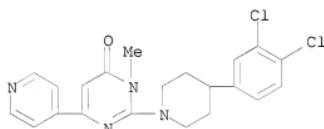
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 (CA INDEX NAME)



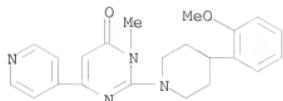
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 (CA INDEX NAME)



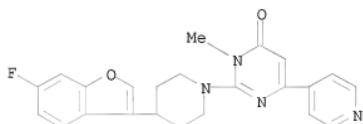
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 (CA INDEX NAME)



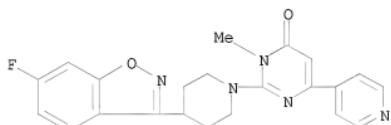
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 (CA INDEX NAME)



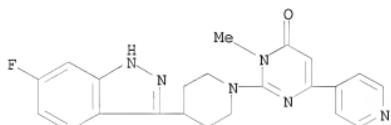
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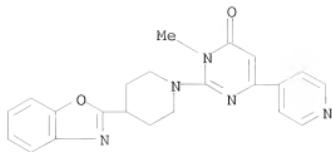
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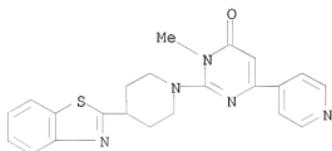
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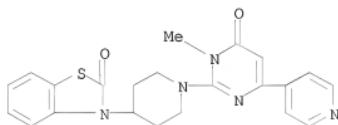
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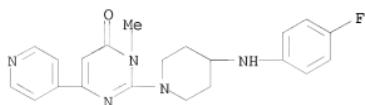
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 CN 4(3H)-Pyrimidinone, 2-[4-(2-benzothiazolyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-46-3 CAPLUS  
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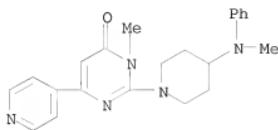


RN 769942-47-4 CAPLUS  
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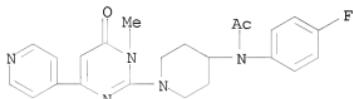


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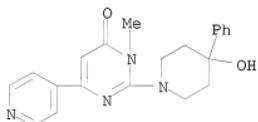
pyridinyl)- (CA INDEX NAME)



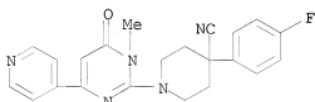
RN 769942-49-6 CAPLUS  
 CN Acetamide, N-[1-[1,6-dihydro-1-methyl-6-oxo-4-(4-pyridinyl)-2-pyrimidinyl]-4-piperidinyl]-N-(4-fluorophenyl)- (CA INDEX NAME)



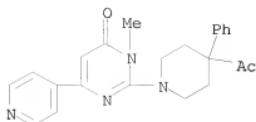
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 CN 4(3H)-Pyrimidinone, 2-(4-hydroxy-4-phenyl-1-piperidinyl)-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-51-0 CAPLUS  
 CN 4-Piperidinocarbonitrile, 1-[1,6-dihydro-1-methyl-6-oxo-4-(4-pyridinyl)-2-pyrimidinyl]-4-(4-fluorophenyl)- (CA INDEX NAME)



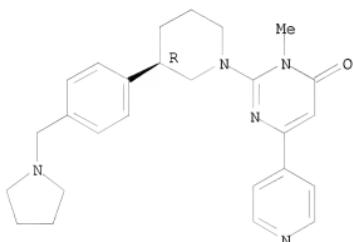
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 CN 4(3H)-Pyrimidinone, 2-(4-acetyl-4-phenyl-1-piperidinyl)-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-53-2 CAPLUS

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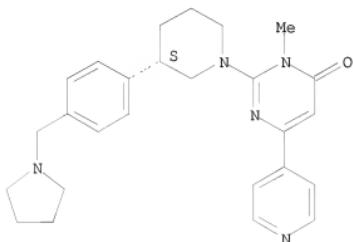
Absolute stereochemistry.



RN 769942-54-3 CAPLUS

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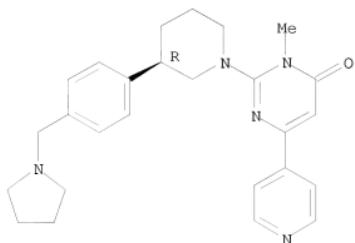
Absolute stereochemistry.



RN 769942-55-4 CAPLUS

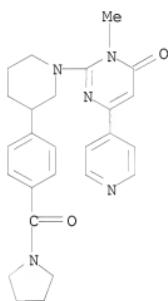
CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[(3R)-3-[4-(1-pyrrolidinylmethyl)phenyl]-1-piperidinyl]-, hydrochloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.



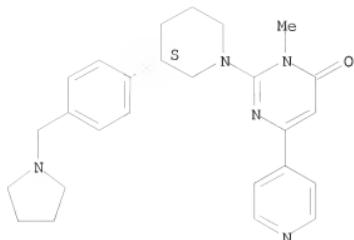
● HCl

RN 769942-56-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[3-[4-(1-pyrrolidinylcarbonyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)



RN 769942-57-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[(3S)-3-[4-(1-pyrrolidinylmethyl)phenyl]-1-piperidinyl]-, hydrochloride (1:1) (CA INDEX NAME)

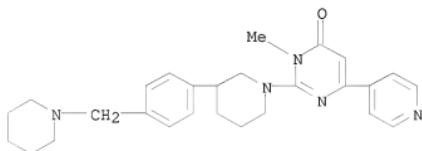
Absolute stereochemistry.



● HCl

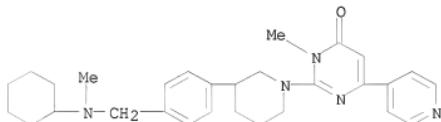
RN 769942-58-7 CAPLUS

CN 4(3H)-Pyrimidinone, 3-methyl-2-[3-[4-(1-piperidinylmethyl)phenyl]-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-59-8 CAPLUS

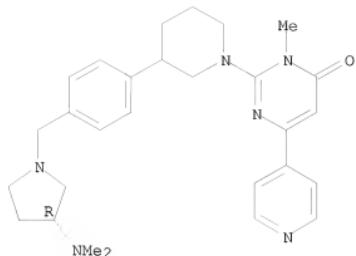
CN 4(3H)-Pyrimidinone, 2-[3-[4-[(cyclohexylmethylamino)methyl]phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-60-1 CAPLUS

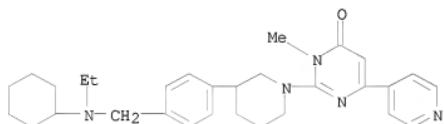
CN 4(3H)-Pyrimidinone, 2-[3-[4-[(3R)-3-(dimethylamino)-1-pyrrolidinyl]methyl]phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)-, hydrochloride (1:3) (CA INDEX NAME)

Absolute stereochemistry.

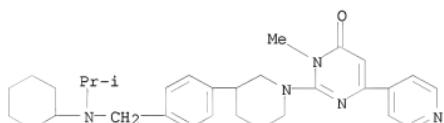


## ● 3 HCl

RN 769942-61-2 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-[(cyclohexylethylamino)methyl]phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

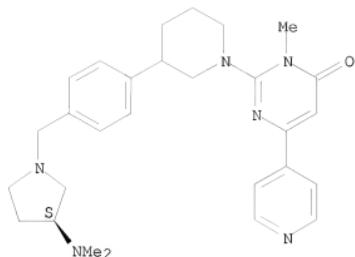


RN 769942-62-3 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-[(cyclohexyl(1-methylethyl)amino)methyl]phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



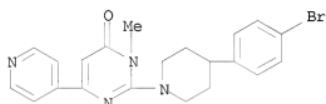
RN 769942-63-4 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-[(3S)-3-(dimethylamino)-1-pyrrolidinyl]methyl]phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)-, hydrochloride (1:3) (CA INDEX NAME)

Absolute stereochemistry.

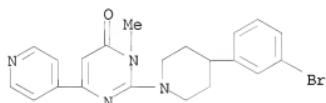


## ● 3 HCl

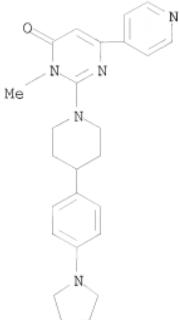
RN 769942-64-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(4-bromophenyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-65-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(3-bromophenyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

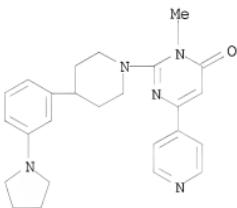


RN 769942-66-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[4-[4-(1-pyrrolidinyl)phenyl]-1-piperidinyl]- (CA INDEX NAME)



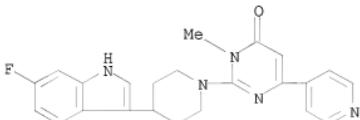
RN 769942-67-8 CAPLUS

CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[4-{3-(1-pyrrolidinyl)phenyl]-1-piperidinyl}- (CA INDEX NAME)



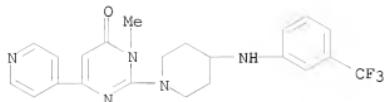
RN 769942-68-9 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[4-(6-fluoro-1H-indol-3-yl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

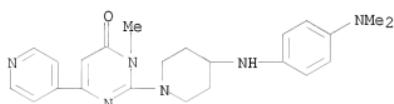


RN 769942-69-0 CAPLUS

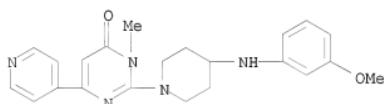
CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[4-[(3-(trifluoromethyl)phenyl)amino]-1-piperidinyl]- (CA INDEX NAME)



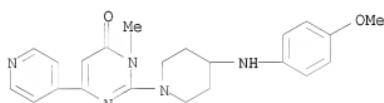
RN 769942-70-3 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(4-(dimethylamino)phenyl)amino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



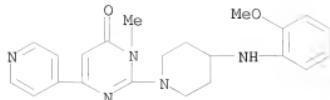
RN 769942-71-4 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(3-methoxyphenyl)amino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



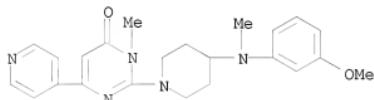
RN 769942-72-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(4-methoxyphenyl)amino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



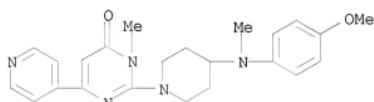
RN 769942-73-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(2-methoxyphenyl)amino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



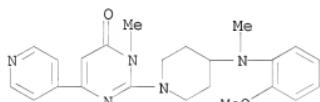
RN 769942-74-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(3-methoxyphenyl)methylamino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



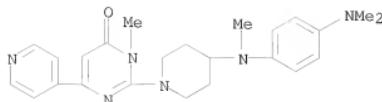
RN 769942-75-8 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(4-methoxyphenyl)methylamino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



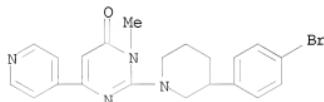
RN 769942-76-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(2-methoxyphenyl)methylamino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



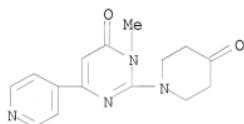
RN 769942-77-0 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(4-dimethylamino)phenyl)methylamino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



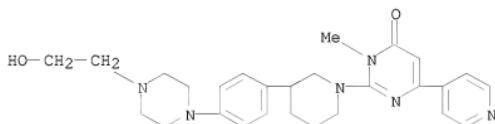
RN 769942-78-1 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-(4-bromophenyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



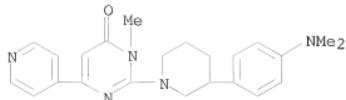
RN 769942-79-2 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-2-(4-oxo-1-piperidinyl)-6-(4-pyridinyl)- (CA INDEX NAME)



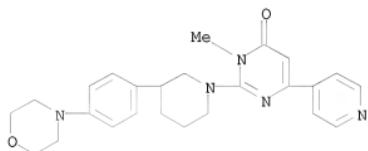
RN 769942-80-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-[4-(2-hydroxyethyl)-1-piperazinyl]phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



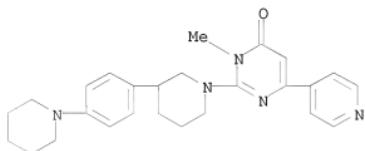
RN 769942-81-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(dimethylamino)phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



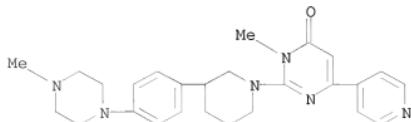
RN 769942-82-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-2-[3-[4-(4-morpholinyl)phenyl]-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-83-8 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-2-[3-[4-(1-piperidinyl)phenyl]-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)

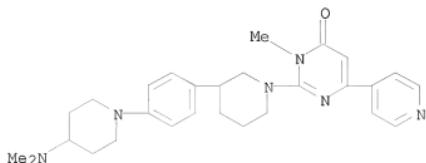


RN 769942-84-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-2-[3-[4-(4-methyl-1-piperazinyl)phenyl]-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



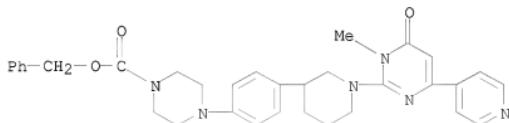
RN 769942-85-0 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-[4-(dimethylamino)-1-piperidinyl]phenyl]-1-

piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



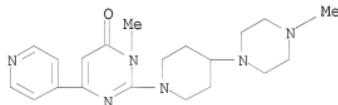
RN 769942-86-1 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[4-[(1,6-dihydro-1-methyl-6-oxo-4-(4-pyridinyl)-2-pyrimidinyl]3-piperidinyl]phenyl]-, phenylmethyl ester (CA INDEX NAME)



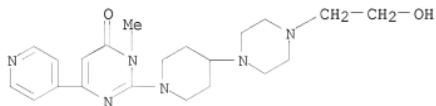
RN 769942-87-2 CAPLUS

CN 4(3H)-Pyrimidinone, 3-methyl-2-[(4-methyl-1-piperazinyl)-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-88-3 CAPLUS

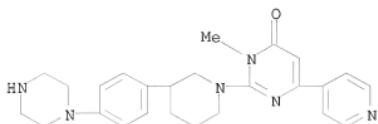
CN 4(3H)-Pyrimidinone, 2-[(4-[(2-hydroxyethyl)-1-piperazinyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



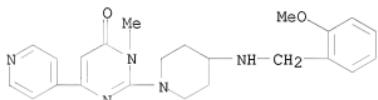
RN 769942-89-4 CAPLUS

CN 4(3H)-Pyrimidinone, 3-methyl-2-[(3-[(4-(1-piperazinyl)phenyl]-1-piperidinyl)-1-piperidinyl]-

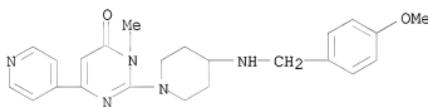
6-(4-pyridinyl)- (CA INDEX NAME)



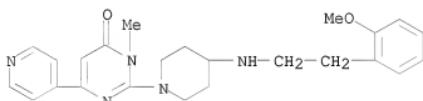
RN 769942-90-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(2-methoxyphenyl)methyl]amino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



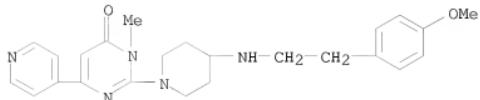
RN 769942-91-8 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(4-methoxyphenyl)methyl]amino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



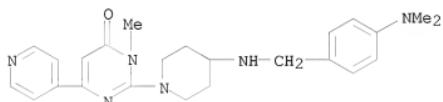
RN 769942-92-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(2-(2-methoxyphenyl)ethyl)amino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



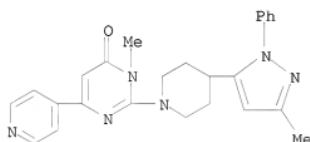
RN 769942-93-0 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(2-(4-methoxyphenyl)ethyl)amino]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



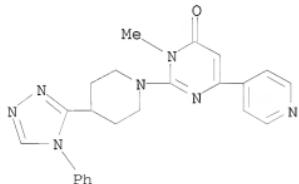
RN 769942-94-1 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(4-(dimethylamino)phenyl)methyl]amino]-1-piperidinyl-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



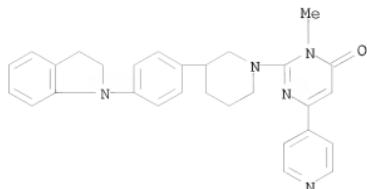
RN 769942-95-2 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-2-[4-(3-methyl-1-phenyl-1H-pyrazol-5-yl)-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



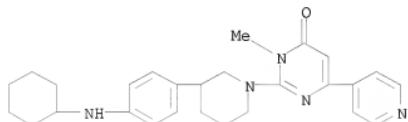
RN 769942-96-3 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-2-[4-(4-phenyl-4H-1,2,4-triazol-3-yl)-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



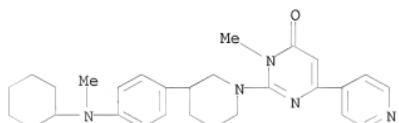
RN 769942-97-4 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(2,3-dihydro-1H-indol-1-yl)phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



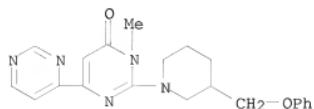
RN 769942-98-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(cyclohexylamino)phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769942-99-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[4-(cyclohexylmethylamino)phenyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

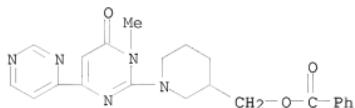


RN 769943-97-7 CAPLUS  
 CN [4,4'-Bipyrimidin]-6(1H)-one, 1-methyl-2-[3-(phenoxyethyl)-1-piperidinyl]- (CA INDEX NAME)

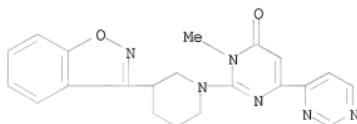


RN 769943-98-8 CAPLUS

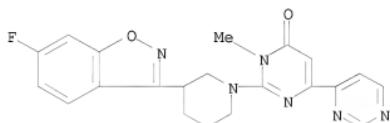
CN [4, 4'-Bipyrimidin]-6-one, 2-[3-[(benzoyloxy)methyl]-1-piperidinyl]-1,6-dihydro-1-methyl- (CA INDEX NAME)



RN 769943-99-9 CAPLUS  
 CN [4, 4'-Bipyrimidin]-6(1H)-one, 2-[3-(1,2-benzisoxazol-3-yl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)

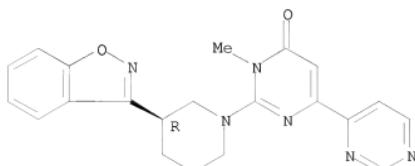


RN 769944-00-5 CAPLUS  
 CN [4, 4'-Bipyrimidin]-6(1H)-one, 2-[3-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)



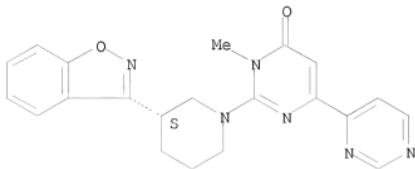
RN 769944-01-6 CAPLUS  
 CN [4, 4'-Bipyrimidin]-6(1H)-one, 2-[(3R)-3-(1,2-benzisoxazol-3-yl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)

Absolute stereochemistry.

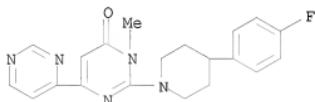


RN 769944-02-7 CAPLUS  
 CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[{(3S)-3-(1,2-benzisoxazol-3-yl)-1-piperidinyl}-1-methyl- (CA INDEX NAME)

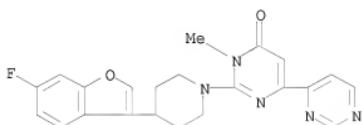
Absolute stereochemistry.



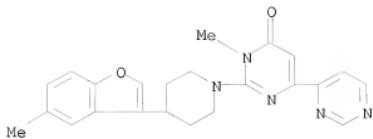
RN 769944-03-8 CAPLUS  
 CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[4-(4-fluorophenyl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)



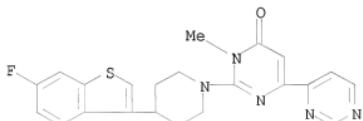
RN 769944-04-9 CAPLUS  
 CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[4-(6-fluoro-3-benzofuranyl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)



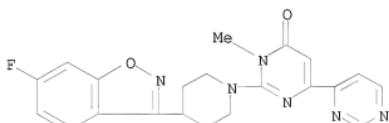
RN 769944-05-0 CAPLUS  
 CN [4,4'-Bipyrimidin]-6(1H)-one, 1-methyl-2-[4-(5-methyl-3-benzofuranyl)-1-piperidinyl]- (CA INDEX NAME)



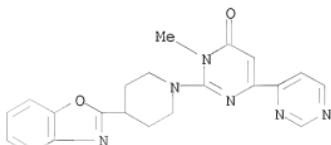
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 CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[4-(6-fluorobenzo[b]thien-3-yl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)



RN 769944-07-2 CAPLUS  
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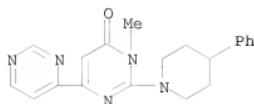


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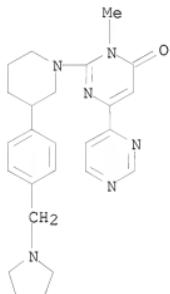
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INDEX NAME)



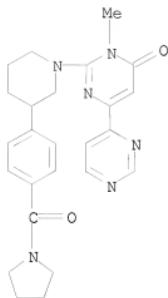
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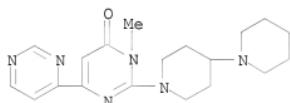


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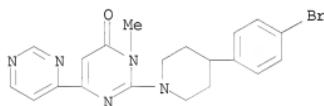
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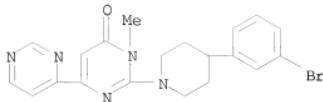
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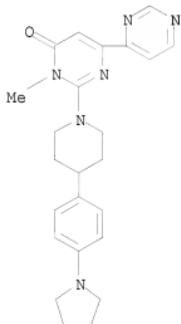
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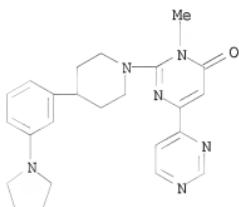
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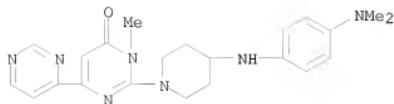
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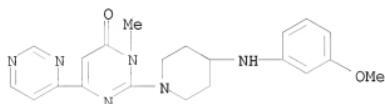
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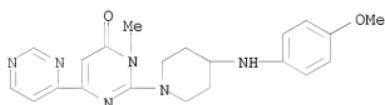
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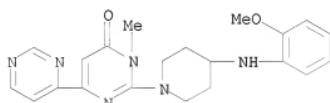
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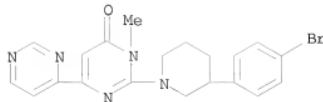
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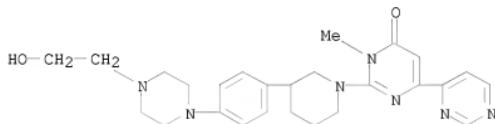
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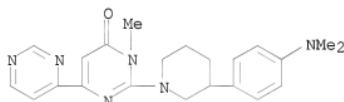
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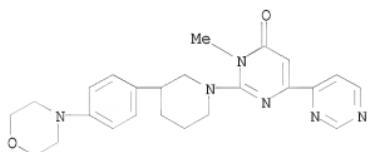
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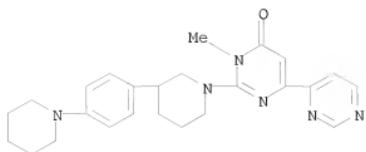
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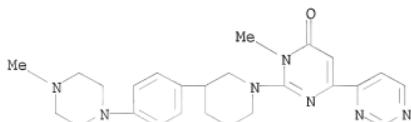
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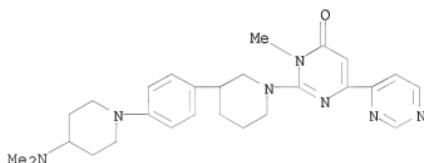
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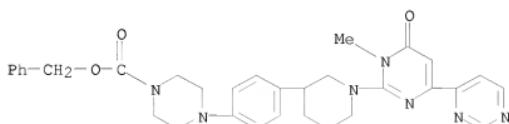
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RN 769944-27-6 CAPLUS  
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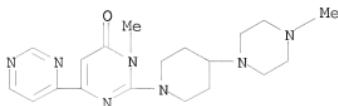


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 CN 1-Piperazinecarboxylic acid, 4-[4-[1-(1,6-dihydro-1-methyl-6-oxo[4,4'-bipyrimidin]-2-yl)-3-piperidinyl]phenyl]-, phenylmethyl ester (CA INDEX NAME)



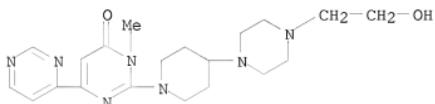
RN 769944-29-8 CAPLUS

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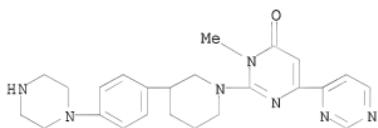
RN 769944-30-1 CAPLUS

CN [4, 4'-Bipyrimidin]-6(1H)-one, 2-[4-[4-(2-hydroxyethyl)-1-piperazinyl]-1-piperidinyl]-1-methyl- (CA INDEX NAME)



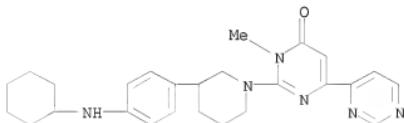
RN 769944-31-2 CAPLUS

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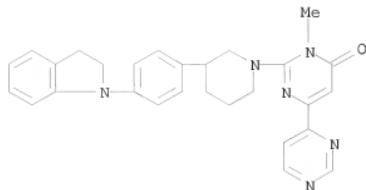
RN 769944-32-3 CAPLUS

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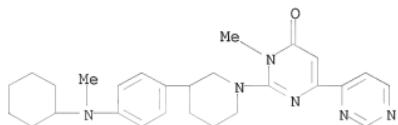


RN 769944-33-4 CAPLUS

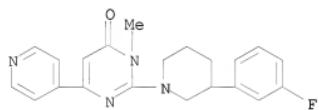
CN [4, 4'-Bipyrimidin]-6(1H)-one, 2-[3-[4-(2,3-dihydro-1H-indol-1-yl)phenyl]-1-piperidinyl]-1-methyl- (CA INDEX NAME)



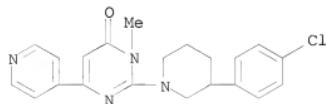
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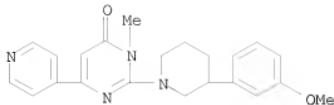
RN 769945-17-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-(3-fluorophenyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



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 CN 4(3H)-Pyrimidinone, 2-[3-(4-chlorophenyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

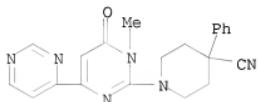


RN 769945-19-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-(3-methoxyphenyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 769945-34-8 CAPLUS

CN 4-Piperidinecarbonitrile, 1-(1,6-dihydro-1-methyl-6-oxo[4,4'-bipyrimidin]-2-yl)-4-phenyl- (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2004:534195 CAPLUS  
 DN 141:71559  
 TI Preparation of pyridinyl-4-pyrimidone derivatives as tau protein kinase 1 inhibitors for the treatment of neurodegenerative diseases  
 IN Usui, Yoshihiro; Okuyama, Masahiro; Hanano, Tokushi  
 PA Mitsubishi Pharma Corporation, Japan; Sanofi-Synthelabo  
 SO PCT Int. Appl., 55 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

**Applicant's**

FAN.CNT 1

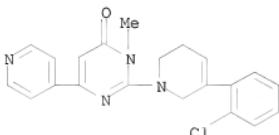
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	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2510170	A1	20040701	CA 2003-2510170	20031212
	AU 2003285777	A1	20040709	AU 2003-285777	20031212
	EP 1572681	A1	20050914	EP 2003-778893	20031212
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	CN 1726209	A	20060125	CN 2003-80106258	20031212
	JP 2006510684	T	20060330	JP 2004-560630	20031212
	ZA 2005005258	A	20060927	ZA 2005-5258	20031212
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	NO 2005003449	A	20050715	NO 2005-3449	20050715
PRAI	JP 2002-383300	A	20022126		
	JP 2002-383301	A	20022126		
	WO 2003-JP15968	W	20031212		
OS	MARPAT 141:71559				
AB	Pyrimidone derivs. of formula I [S = CH, N; R1 = alkyl; R2 = alkyl, (substituted) Ph, (substituted) naphthalenyl, (substituted) indanyl (substituted) tetrahydronaphthalenyl, (substituted) heterocycl] are prepared as tau protein kinase 1 inhibitors. Thus, II was prepared in several steps. Pharmaceutical compns. containing II are described.				
IT	712343-67-4P 712343-68-5P 712343-69-6P				
	712343-70-9P 712343-71-0P 712343-72-1P				
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 712344-06-4P 712344-07-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of pyridinyl pyrimidone derivs. as tau protein kinase 1 inhibitors)

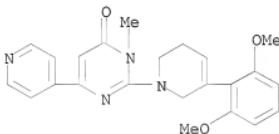
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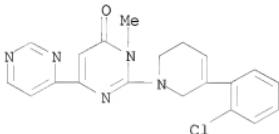
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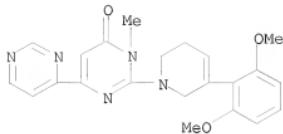
RN 712343-69-6 CAPLUS

CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[3-(2-chlorophenyl)-5,6-dihydro-1(2H)-pyridinyl]-1-methyl- (CA INDEX NAME)

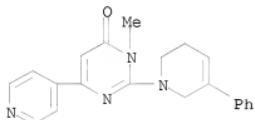


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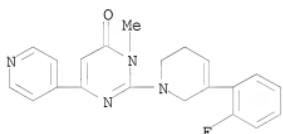
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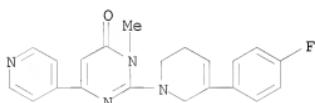
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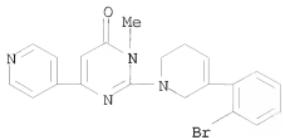
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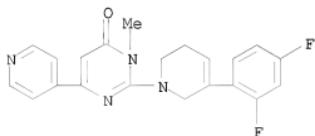
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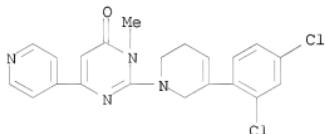
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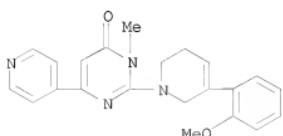
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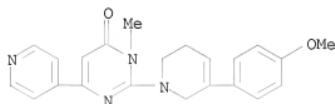
RN 712343-76-5 CAPLUS  
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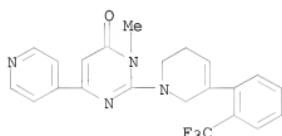
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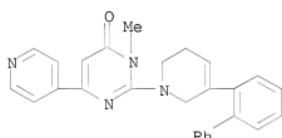
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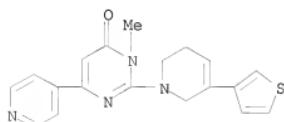
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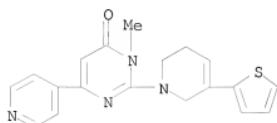
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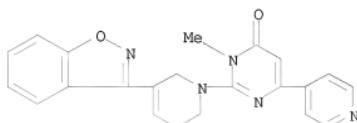
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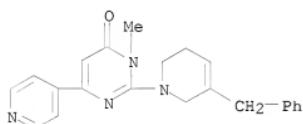
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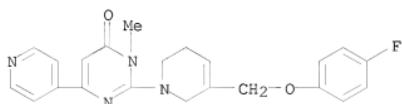
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RN 712343-84-5 CAPLUS  
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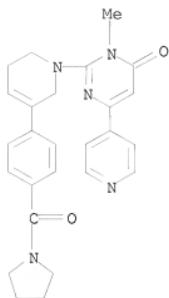


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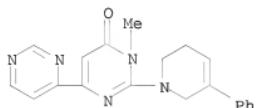


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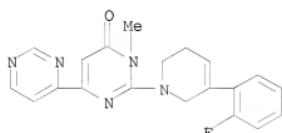
pyrimidinyl]-1,2,5,6-tetrahydro-3-pyridinyl]benzoyl]- (9CI) (CA INDEX NAME)



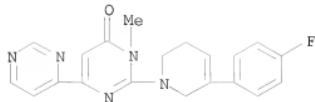
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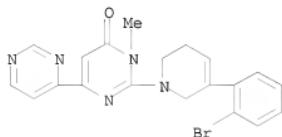
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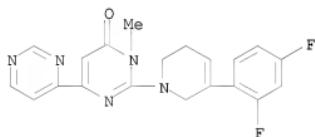
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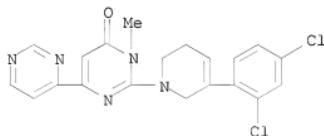
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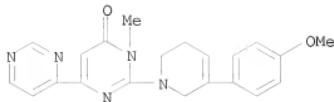
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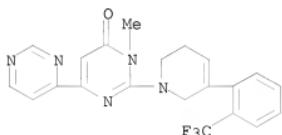
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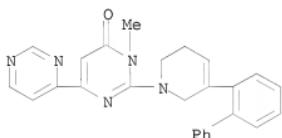
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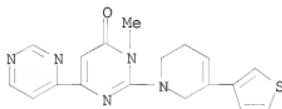
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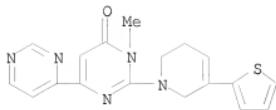
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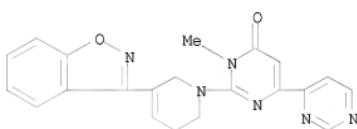
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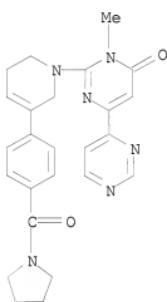
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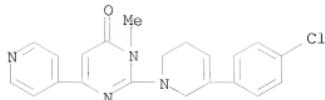
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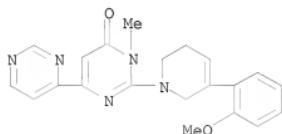
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 CN Pyrrolidine, 1-[4-[1-(1,6-dihydro-1-methyl-6-oxo[4,4'-bipyrimidin]-2-yl)-1,2,5,6-tetrahydro-3-pyridinyl]benzoyl]- (9CI) (CA INDEX NAME)



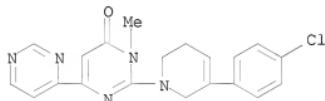
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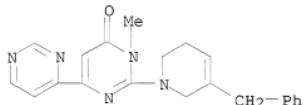
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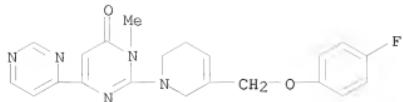
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RN 712344-06-4 CAPLUS  
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RN 712344-07-5 CAPLUS  
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RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2003:356440 CAPLUS  
 DN 138:368904  
 TI Preparation of 3-substituted 4-pyrimidones as tau protein kinase 1  
 inhibitors  
 IN Uehara, Fumiaki; Aritomo, Keiichi; Shoda, Aya; Hiki, Shinsuke; Okuyama,  
 Masahiro; Usui, Yoshihiro; Oozumi, Mitsuru; Watanabe, Kazutoshi;  
 Yamakoshi, Koichi  
 PA Mitsubishi Pharma Corporation, Japan; Sanofi-Synthelabo  
 SO PCT Int. Appl., 153 PP. common inventor  
 CODEN: PIXDZ  
 DT Patent  
 LA English  
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003037888	A1	20030508	WO 2002-JP9685	20020920
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2002337499	A1	20030512	AU 2002-337499	20020920
AU 2002337499	B2	20070823		
EP 1427720	A1	20040616	EP 2002-772871	20020920
EP 1427720	B1	20090304		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002012892	A	20040803	BR 2002-12892	20020920
CN 1556804	A	20041222	CN 2002-818469	20020920
HU 2004001900	A2	20041228	HU 2004-1900	20020920
HU 2004001900	A3	20050829		
JP 2005510506	T	20050421	JP 2003-540169	20020920
NZ 531636	A	20051125	NZ 2002-531636	20020920
CN 1810802	A	20060802	CN 2005-10097948	20020920
TW 265164	B	20061101	TW 2002-91121655	20020920
CN 101274928	A	20081001	CN 2008-10007669	20020920
ZA 2004001845	A	20050307	ZA 2004-1845	20040305
ZA 2004001850	A	20050307	ZA 2004-1850	20040305
MX 2004002662	A	20041122	MX 2004-2662	20040319
KR 881821	B1	20090203	KR 2004-704112	20040319
NO 2004001600	A	20040616	NO 2004-1600	20040420
NO 325781	B1	20080714		
IN 2004CN00819	A	20060113	IN 2004-CN819	20040420
US 20050090490	A1	20050428	US 2004-489606	20041101
US 7427615	no ODP	20080923	<b>two structural differences</b>	
PRAI JP 2001-331674	A	20010921		
JP 2001-331675	A	20010921		
JP 2001-331677	A	20010921		
JP 2001-331678	A	20010921		
CN 2002-818469	A3	20020920		

WO 2002-JP9685 W 20020920  
 OS MARPAT 138:368904

AB The title compds. [I; R1 = (un)substituted alkyl; R = NHCR2R3COR4, II-IV (wherein R2, R3 = H, alkyl; R4 = (un)substituted Ph, naphthyl, indanyl, etc.; R5 = (un)substituted alkyl, cycloalkyl, Ph, etc.; R6 = H, (un)substituted alkyl, Ph; or R5 and R6 may bind to each other to form spiro carbocyclic ring having 3-11 ring-constituting atoms in total; R7, R8 = H, alkyl; or R7 and R8 may combine to each other to form alkylene; R9 and R10 = (un)substituted alkyl, cycloalkyl, Ph, etc.; X = CH2, O, NR13; R13 = H, alkyl], useful for preventive or therapeutic treatment of a disease caused by tau protein kinase 1 hyperactivity (e.g. Alzheimer's disease), were prepared and formulated. Thus, reacting 2-amino-1-phenylethanone.HCl with 2-chloro-3-methyl-6-(4-pyridyl)pyrimidine-4-one (preparation given) in the presence of DMAP and Et3N in DMSO afforded 68% V which showed IC50 of 8.9 nM against P-GS1 phosphorylation by bovine cerebral TPK1.

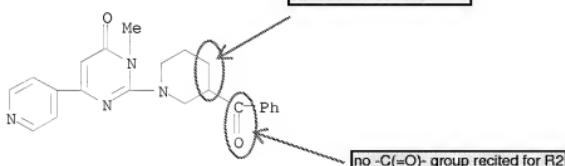
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 521969-10-8P 521969-11-9P 521969-12-0P  
 521969-13-1P 521969-14-2P 521969-15-3P  
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 521969-33-5P 521969-35-7P 521969-37-9P  
 521969-39-1P 521969-41-5P 521969-42-6P  
 521969-93-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 3-substituted 4-pyrimidones as tau protein kinase 1 inhibitors)

RN 521968-94-5 CAPLUS

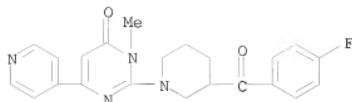
CN 4(3H)-Pyrimidinone, 2-[3-(benzoyl-1-piperidinyl)-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

**claims have a = bond here**

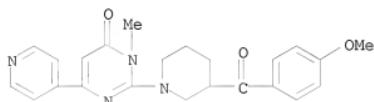


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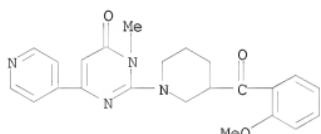
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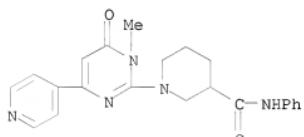
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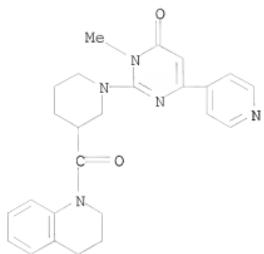
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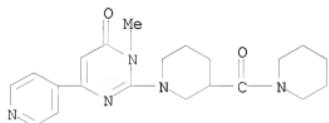
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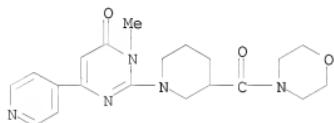
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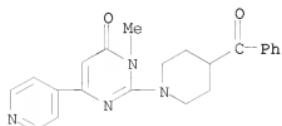
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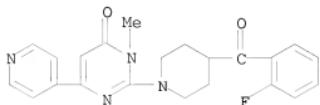
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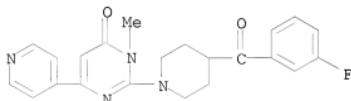
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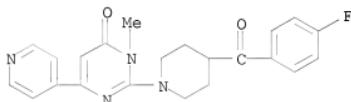
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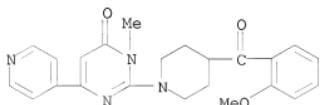
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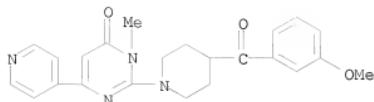
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 CN 4(3H)-Pyrimidinone, 2-[4-(4-fluorobenzoyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



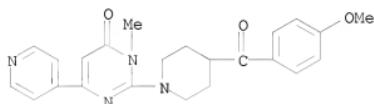
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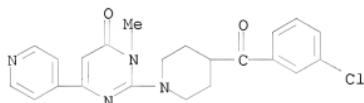
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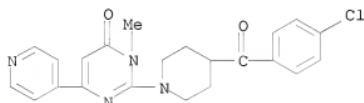
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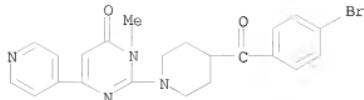
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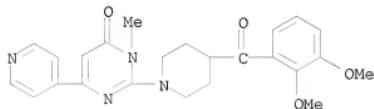
RN 521969-17-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(4-chlorobenzoyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



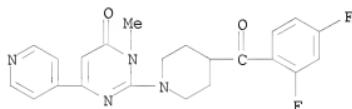
RN 521969-18-6 CAPLUS  
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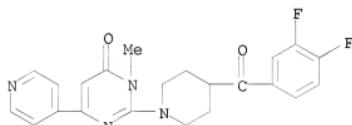
RN 521969-19-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(2,3-dimethoxybenzoyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



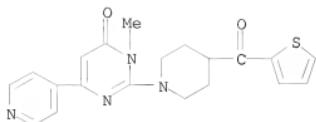
RN 521969-20-0 CAPLUS  
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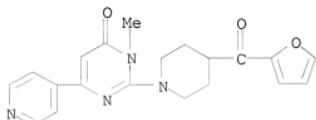
RN 521969-21-1 CAPLUS  
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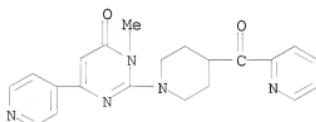
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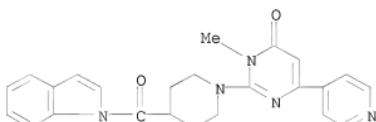
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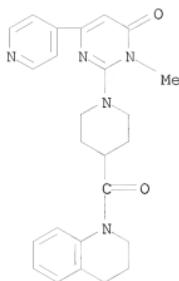
RN 521969-25-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 3-methyl-6-(4-pyridinyl)-2-[4-(2-pyridinylcarbonyl)-1-piperidinyl]- (CA INDEX NAME)



RN 521969-27-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(1H-indol-1-ylcarbonyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)

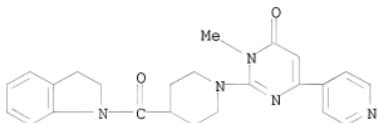


RN 521969-29-9 CAPLUS  
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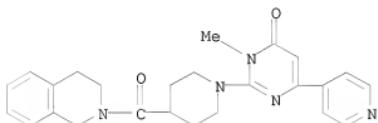
RN 521969-31-3 CAPLUS

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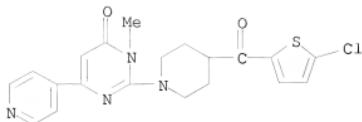
RN 521969-33-5 CAPLUS

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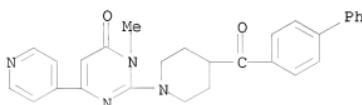


RN 521969-35-7 CAPLUS

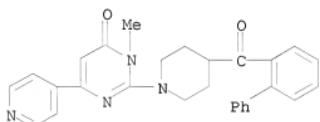
CN 4(3H)-Pyrimidinone, 2-[4-[(5-chloro-2-thienyl)carbonyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



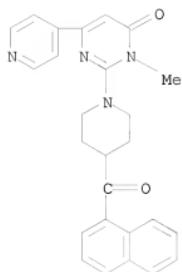
RN 521969-37-9 CAPLUS  
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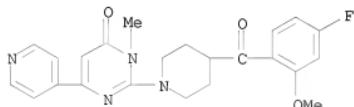
RN 521969-39-1 CAPLUS  
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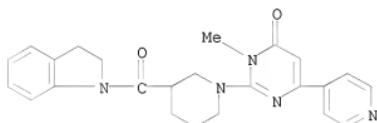
RN 521969-41-5 CAPLUS  
 CN 4(3H)-Pirimidinone, 3-methyl-2-[4-(1-naphthalenylcarbonyl)-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



RN 521969-42-6 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(4-fluoro-2-methoxybenzoyl)-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RN 521969-93-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[3-[(2,3-dihydro-1H-indol-1-yl)carbonyl]-1-piperidinyl]-3-methyl-6-(4-pyridinyl)- (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2003:261819 CAPLUS  
 DN 138:287693  
 TI Preparation of 6-pyrimidinyl 3-substituted-4-pyrimidones that inhibit tau protein kinase 1 useful against neurodegenerative diseases like Alzheimer's disease  
 IN Uehara, Fumiaki; Aritomo, Keiichi; Shoda, Aya; Hiki, Shinsuke; Okuyama, Masahiro; Usui, Yoshihiro; Ooizumi, Mitsuru; Watanabe, Kazutoshi  
 PA Mitsubishi Pharma Corporation, Japan; Sanofi-Synthelabo  
 SO PCT Int. Appl., 135 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003027080	A1	20030403	WO 2002-JP9684	20020920
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2460177	A1	20030403	CA 2002-2460177	20020920
AU 2002337498	A1	20030407	AU 2002-337498	20020920
AU 2002337498	B2	20060810		
EP 1427709	A1	20040616	EP 2002-772870	20020920
EP 1427709	B1	20051214		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002012893	A	20040803	BR 2002-12893	20020920
CN 1555367	A	20041215	CN 2002-818017	20020920
CN 1319950	C	20070606		
HU 2004001898	A2	20041228	HU 2004-1898	20020920
HU 2004001898	A3	20050829		
JP 20050510472	T	20050421	JP 2003-530670	20020920
AT 312827	T	20051215	AT 2002-772870	20020920
NZ 531637	A	20051223	NZ 2002-531637	20020920
ES 2256540	T3	20060716	ES 2002-772870	20020920
CN 1810802	A	20060802	CN 2005-10097948	20020920
CN 101274928	A	20081001	CN 2008-10007669	20020920
ZA 2004001845	A	20050307	ZA 2004-1845	20040305
ZA 2004001850	A	20050307	ZA 2004-1850	20040305
MX 2004002661	A	20041122	MX 2004-2661	20040319
KR 754596	B1	20070905	KR 2004-704113	20040319
NO 2004001604	A	20040617	NO 2004-1604	20040420
IN 2004CN00821	A	20060113	IN 2004-CN821	20040420
HK 1068608	A1	20060721	HK 2004-109693	20041207
US 20050130967	A1	20050616	US 2005-489607	20050208
PRAI JP 2001-331674	A	20010921		
JP 2001-331675	A	20010921		
JP 2001-331676	A	20010921		
JP 2001-331678	A	20010921		

JP 2001-331677	A	20010921
CN 2002-818469	A3	20020920
WO 2002-JE9684	W	20020920

OS MARPAT 138:287693

AB 6-Pyrimidinyl 3-substituted-4-pyrimidones (shown as I; variables defined below; e.g. 3-methyl-2-(2-oxo-2-phenylethylamino)-6-pyrimidin-4-yl-3H-pyrimidin-4-one), or a salt, solvate or hydrate thereof, having inhibitory activity against tau protein kinase 1 are claimed. For I: R1 = C1-C12 alkyl that may be substituted; R = NHCR2R3C(O)R4, etc. (R2 and R3 = H or a C1-C8 alkyl group; R4 = (un)substituted benzene, naphthalene, indan, tetrahydronaphthalene, or heterocyclic ring having 1-4 hetero atoms O atom, S atom and N atom, and having 5-10 ring-constituting atoms in total). Although the methods of preparation are not claimed, 5 example preps. and characterization data for 75 examples of I are included. IC<sub>50</sub> values for inhibition of tau protein kinase 1 by 77 examples of I are tabulated. Two examples of pharmaceutical formulations based on I are listed.

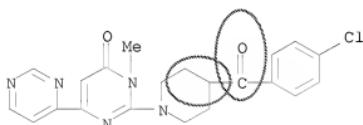
IT 503860-59-1P, 2-[4-(4-Chlorobenzoyl)piperidin-1-yl]-3-methyl-6-(pyrimidin-4-yl)-3H-pyrimidin-4-one 503861-31-2P, 2-[3-(4-Fluorobenzoyl)piperidin-1-yl]-3-methyl-6-(pyrimidin-4-yl)-3H-pyrimidin-4-one 503861-32-3P, 2-[3-(4-Benzoylpiperidin-1-yl)-3-methyl-6-(pyrimidin-4-yl)-3H-pyrimidin-4-one 503861-33-4P, 2-[3-(2-Methoxybenzoyl)piperidin-1-yl]-3-methyl-6-(pyrimidin-4-yl)-3H-pyrimidin-4-one 503861-34-5P, 2-[3-(4-Methoxybenzoyl)piperidin-1-yl]-3-methyl-6-(pyrimidin-4-yl)-3H-pyrimidin-4-one

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of pyrimidinyl pyrimidones that inhibit tau protein kinase 1 useful against neurodegenerative diseases like Alzheimer's disease)

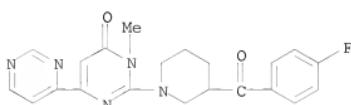
RN 503860-59-1 CAPLUS

CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[4-(4-chlorobenzoyl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)

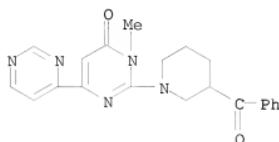


RN 503861-31-2 CAPLUS

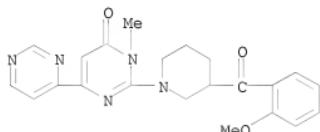
CN [4,4'-Bipyrimidin]-6(1H)-one, 2-[3-(4-fluorobenzoyl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)



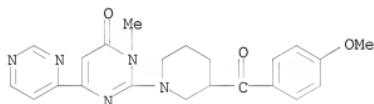
RN 503861-32-3 CAPLUS  
 CN [4, 4'-Bipyrimidin]-6(1H)-one, 2-(3-benzoyl-1-piperidinyl)-1-methyl- (CA INDEX NAME)



RN 503861-33-4 CAPLUS  
 CN [4, 4'-Bipyrimidin]-6(1H)-one, 2-[3-(2-methoxybenzoyl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)



RN 503861-34-5 CAPLUS  
 CN [4, 4'-Bipyrimidin]-6(1H)-one, 2-[3-(4-methoxybenzoyl)-1-piperidinyl]-1-methyl- (CA INDEX NAME)

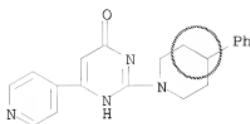


RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2001:709746 CAPLUS  
 DN 135:257261  
 TI Preparation of 2-(piperidin-1-yl)pyrimidones for preventive and/or therapeutic treatment of a neurodegenerative disease caused by abnormal activity of GSK3 $\beta$   
 IN Almario-Garcia, Antonio; Frost, Jonathan Reid; Li-Tak, Adrien  
 PA Sanofi-Synthelabo, Fr.; Mitsubishi-Tokyo Pharmaceuticals, Inc.  
 SO Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 3

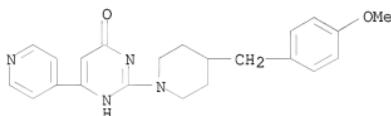
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1136489	A1	20010926	EP 2000-400802	20000323
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	WO 2001070728	A1	20010927	WO 2001-EP3639	20010322
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001062150	A	20011003	AU 2001-62150	20010322
PRAI	EP 2000-400801	A	20000323		
	EP 2000-400802	A	20000323		
	EP 2000-400803	A	20000323		
	WO 2001-EP3639	W	20010322		
OS	MARPAT 135:257261				
AB	The title compds. [I; R1 = (un)substituted aryl, heterocyclic ring having 1-4 hetero atoms selected from O, S, and N atoms, (un)substituted alkyl; R2 = pyridyl optionally substituted by alkyl, alkoxy or halo] and their salts, useful for preventive and/or therapeutic treatment of a neurodegenerative disease caused by abnormal activity of GSK3 $\beta$ , such as Alzheimer's disease, Parkinson's disease, frontoparietal dementia, corticobasal degeneration, Pick's disease, cerebrovascular accidents, brain and spinal trauma, and peripheral neuropathy, were prepared and formulated. E.g., a 3-step synthesis of I [R1 = Ph; R2 = 4-pyridyl] was given. All exemplified compds. I showed IC50's of 0.5-10 $\mu$ M against GSK3 $\beta$ .				
IT	362467-40-1P 362467-42-3P 362467-44-5P 362467-46-7P 362467-48-9P 362467-49-0P 362467-50-3P 362467-51-4P 362467-52-5P 362467-53-6P 362467-54-7P				
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 2-(piperidin-1-yl)pyrimidones for preventive and/or therapeutic treatment of a neurodegenerative disease caused by abnormal activity of GSK3 $\beta$ )				
RN	362467-40-1 CAPLUS				
CN	4(3H)-Pyrimidinone, 2-(4-phenyl-1-piperidinyl)-6-(4-pyridinyl)- (CA INDEX				

NAME)

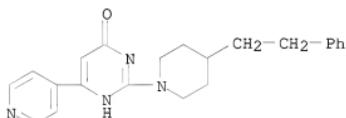


**Two differences:**  
 - (1) no unsaturation  
 - (2) the position of  
 the phenyl sub on  
 piperidine

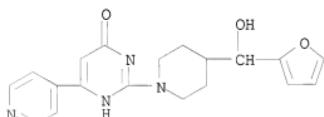
RN 362467-42-3 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-[(4-methoxyphenyl)methyl]-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



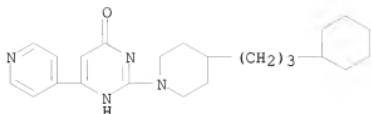
RN 362467-44-5 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(2-phenylethyl)-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



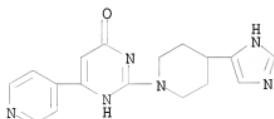
RN 362467-46-7 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(2-furanylhydroxymethyl)-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



RN 362467-48-9 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(3-cyclohexylpropyl)-1-piperidinyl]-6-(4-pyridinyl)- (CA INDEX NAME)



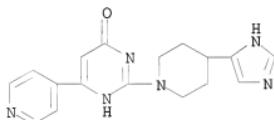
RN 362467-49-0 CAPLUS  
 CN 4(3H)-Pyrimidinone, 2-[4-(1H-imidazol-5-yl)-1-piperidinyl]-6-(4-pyridinyl)-  
 (CA INDEX NAME)



RN 362467-50-3 CAPLUS  
 CN 4(1H)-Pyrimidinone, 2-[4-(1H-imidazol-4-yl)-1-piperidinyl]-6-(4-pyridinyl)-  
 , (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

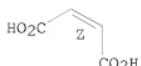
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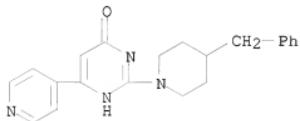
CM 2

CRN 110-16-7  
 CMF C4 H4 O4

Double bond geometry as shown.



RN 362467-51-4 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[4-(phenylmethyl)-1-piperidinyl]-6-(4-pyridinyl)-  
(CA INDEX NAME)

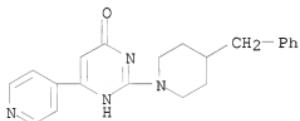
RN 362467-52-5 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[4-(phenylmethyl)-1-piperidinyl]-6-(4-pyridinyl)-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 362467-51-4

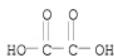
CMF C21 H22 N4 O



CM 2

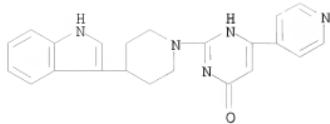
CRN 144-62-7

CMF C2 H2 O4

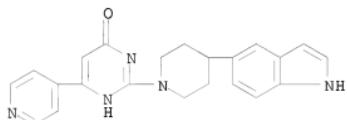


RN 362467-53-6 CAPLUS

CN 4(3H)-Pyrimidinone, 2-[4-(1H-indol-3-yl)-1-piperidinyl]-6-(4-pyridinyl)-  
(CA INDEX NAME)



RN 362467-54-7 CAPLUS  
CN 4(3H)-Pyrimidinone, 2-[4-(1H-indol-5-yl)-1-piperidinyl]-6-(4-pyridinyl)-  
(CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2001:709740 CAPLUS  
 DN 135:257256  
 TI Preparation of 2-amino-3-alkyl-pyrimidones as GSK3 $\beta$  inhibitors  
 IN Almario-Garcia, Antonio; Frost, Jonathan Reid; Li, Adrien-Tak; Ando, Ryioichi; Watanabe, Kazutoshi  
 PA Sanofi-Synthelabo, Fr.; Mitsubishi-Tokyo Pharmaceuticals, Inc.  
 SO Eur. Pat. Appl., 20 pp.  
 CODEN: EPXXDW

DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1136482	A1	20010926	EP 2000-400800	20000323
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CA 2401241	A1	20010927	CA 2001-2401241	20010322
	WO 2001070729	A1	20010927	WO 2001-EP3640	20010322
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2001081487	A	20011003	AU 2001-81487	20010322
	EP 1276738	A1	20030122	EP 2001-959921	20010322
	EP 1276738	B1	20071212		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	CN 1419552	A	20030521	CN 2001-806991	20010322
	CN 1247567	C	20060329		
	JP 2003528095	T	20030924	JP 2001-568932	20010322
	CN 18911220	A	20070110	CN 2006-10006135	20010322
	AT 380806	T	20071215	AT 2001-959921	20010322
	ES 2296783	T3	20080501	ES 2001-959921	20010322
	KR 820543	B1	20080407	KR 2002-712431	20020919
	US 20030187004	A1	20031002	US 2002-221598	20021202
	US 6844335	B2	20050118		
	US 20050130998	A1	20050616	US 2005-35264	20050113
	US 7378413	B2	20080527		
PRAI	EP 2000-400800	A	20000323		
	CN 2001-806991	A3	20010322		
	WO 2001-EP3640	W	20010322		
	US 2002-221598	A3	20021202		

OS MARPAT 135:257256

AB The title compds. [I; R1 = H, alkyl; R2 = (un)substituted alkyl, alkenyl, aryl, etc.; or R1 and R2 form together (un)substituted alkylene; or R1 and R2 form together (CH2)2X(CH2)2, (CH2)2X(CH2)3 (wherein X = O, S (un)substituted NH); R3 = 2-, 3- or 4-pyridyl group optionally substituted by alkyl alkoxy or halogen atom; R4 = alkyl optionally substituted by aryl, useful for preventive and/or therapeutic treatment of a neurodegenerative disease caused by abnormal activity of GSK3 $\beta$  such as Alzheimer's disease, Parkinson's disease, frontoparietal dementia,

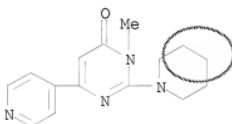
corticobasal degeneration, Pick's disease, cerebrovascular accidents, brain and spinal trauma, and peripheral neuropathies, were prepared and formulated. The compds. I synthesized by reacting 3-methyl-2-(methylthio)-6-pyridin-4-ylpyrimidin-4(3H)-one (preparation given) with the corresponding amine or by N-alkylation of the substituted 2-amino-3-methylpyrimidinone with alkyl iodide. The compds. I showed IC<sub>50</sub>'s of 0.1-10 μM against GSK3β.

IT 362013-99-8P 362014-00-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of 2-amino-3-alkyl-pyrimidones as GSK3β inhibitors)

RN 362013-99-8 CAPLUS

CN 4(3H)-Pyrimidinone, 3-methyl-2-(1-piperidinyl)-6-(4-pyridinyl)- (CA INDEX NAME)



Two differences:  
- no double bond  
- no substituent @ 3-position

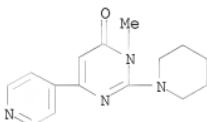
RN 362014-00-4 CAPLUS

CN 4(3H)-Pyrimidinone, 3-methyl-2-(1-piperidinyl)-6-(4-pyridinyl)-,  
(2R,3R)-2,3-dihydroxybutanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 362013-99-8

CMF C15 H18 N4 O

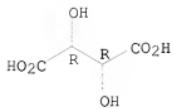


CM 2

CRN 87-69-4

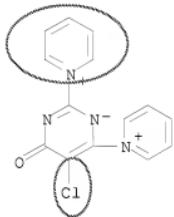
CMF C4 H6 O6

Absolute stereochemistry.



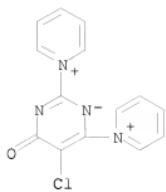
RE.CNT 6      THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2001:335201 CAPLUS  
 DN 135:137457  
 TI Mesomeric betainium salts. Synthesis, X-ray analysis, and ESIMS studies of tripolar pyrimidin-4-olates and pyrimidin-4-aminides  
 AU Schmidt, Andreas; Nieger, Martin  
 CS Technische Universität Clausthal, Institut für Organische Chemie, Clausthal-Zellerfeld, D-38678, Germany  
 SO Heterocycles (2001), 55(5), 827-834  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PB Japan Institute of Heterocyclic Chemistry  
 DT Journal  
 LA English  
 OS CASREACT 135:137457  
 AB Reaction of tetrachloropyrimidine with pyridine in acetone in the presence of NaI yielded the pyrimidin-4-olate (3; shown as I, X = O). Applying analogous reaction conditions to 4-amino substituted 2,5,6-trichloropyrimidine gave bispyridinium salts which yield aminides (6a,b; shown as I, X = NH, NPh) on deprotonation. As evidenced by UV spectroscopy and electrospray MS spectrometry, the title compds. 3 and 6a,b form π-sandwich complexes in solution  
 IT 351535-48-3  
 RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative) (identification by electrospray mass spectrometry)  
 RN 351535-48-3 CAPLUS  
 CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyl)bis-, inner salt, iodide (2:2:1) (9CI) (CA INDEX NAME)



●1/2 I<sup>-</sup>

IT 351535-47-2P  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process) (preparation, crystal structure, neg. solvatochromism and supramol. association of)  
 RN 351535-47-2 CAPLUS  
 CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyl)bis-, inner salt, iodide (9CI) (CA INDEX NAME)

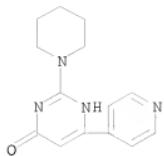


● I<sup>-</sup>

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

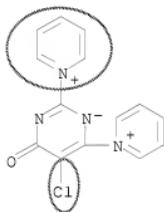
L4 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2000:227649 CAPLUS  
 DN 132:265206  
 TI Preparation of pyrimidones for treating diseases caused by tau protein kinase 1 hyperactivity such as Alzheimer disease  
 IN Watanabe, Kazutoshi; Ando, Ryoichi; Saito, Ken-ichi; Kawamoto, Rie; Shoda, Aya  
 PA Mitsubishi Chemical Corporation, Japan  
 SO PCT Int. Appl., 106 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000018758	A1	20000406	WO 1999-JP5224	19990924
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
TW 241298	B	20051011	TW 1999-88116437	19990923
CA 2345065	A1	20000406	CA 1999-2345065	19990924
AU 9957599	A	20000417	AU 1999-57599	19990924
EP 1115721	A1	20010718	EP 1999-944815	19990924
EP 1115721	B1	20031210		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002525366	T	20020813	JP 2000-572218	19990924
AT 256123	T	20031215	AT 1999-944815	19990924
PT 1115721	T	20040430	PT 1999-944815	19990924
ES 2214045	T3	20040901	ES 1999-944815	19990924
US 7256199	B1	20070814	US 2001-787426	20010702
PRAI JP 1998-271277	A	19980925		
JP 1998-305266	A	19981027		
WO 1999-JP5224	W	19990924		
OS MARPAT 132:265206				
AB The title compd. [I; R1 = C1-18 alkyl, C3-18 alkenyl, C3-18 alkenyl, etc.; R2 = H, OH, C1-18 alkyl, etc.; R3 = (un)substituted pyridyl], useful for preventive and/or therapeutic treatment of a disease caused by tau protein kinase 1 hyperactivity such as Alzheimer disease, were prepared and formulated. Thus, reacting Et 3-(4-pyridyl)-3-oxopropionate with 3-amidinopyridine.HCl in the presence of K2CO3 in EtOH afforded I [R1 = 3-pyridyl; R2 = H; R3 = 4-pyridyl] which showed IC50 of 2.3 $\mu$ M against P-GS1 phosphorylation by bovine cerebral TPK1.				
IT 263244-14-0P				
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of pyrimidones for treating diseases caused by tau protein kinase 1 hyperactivity such as Alzheimer disease)				
RN 263244-14-0 CAPLUS				
CN 4(3H)-Pyrimidinone, 2-(1-piperidinyl)-6-(4-pyridinyl)- (CA INDEX NAME)				



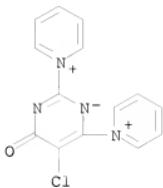
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1999:601373 CAPLUS  
 DN 131:336994  
 TI Novel dipolar and tripolar betaines: synthesis, ring cleavage,  
 spectroscopic features, and x-ray analysis of a positively charged  
 pyrimidin-4-olate  
 AU Schmidt, Andreas; Nieger, Martin  
 CS Ernst-Moritz-Arndt-Universitat Greifswald, Institut fur Chemie und  
 Biochemie, Greifswald, D-17487, Germany  
 SO Heterocycles (1999), 51(9), 2119-2126  
 CODEN: HTCYAM; ISSN: 0385-5414  
 PB Japan Institute of Heterocyclic Chemistry  
 DT Journal  
 LA English  
 AB Reaction of tetrachloropyrimidine with pyridine resulted in the formation  
 of a heteroarom. triole, 2,6-bispyridinopyrimidin-4-olate chloride, the  
 structure of which was established by X-Ray crystallog. Amberlite IRA-400  
 in its hydroxy form converted 2,6-bispyridinopyrimidin-4-olate chloride  
 into a corresponding stable hydroxide, which undergoes ring-cleavage on  
 titration with sodium hydroxide to pH 9. Thus, a  
 5-amino-2,4-pentadienal-appended mesomeric betaine was formed.  
 IT 249931-35-9P  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP  
 (Preparation); RACT (Reactant or reagent)  
 (preparation of dipolar and tripolar betaines, their ring cleavage,  
 properties, and x-ray structure of hydroxypyridinium inner salt)  
 RN 249931-35-9 CAPLUS  
 CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyl)bis-,  
 inner salt, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

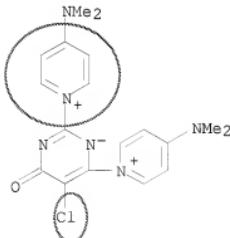
IT 249931-36-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of dipolar and tripolar betaines, their ring cleavage,  
 properties, and x-ray structure of hydroxypyridinium inner salt)  
 RN 249931-36-0 CAPLUS  
 CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyl)bis-,  
 inner salt, hydroxide (9CI) (CA INDEX NAME)



● OH<sup>-</sup>

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1998:446690 CAPLUS  
 DN 129:148956  
 OREF 129:30365a,30368a  
 TI Heteroaromatic Tripoles. 2,6-Bis(hetarenio)pyrimidin-4-olates: Hybrids between Hetarenium Salts and Cross-Conjugated Mesomeric Betaines  
 AU Schmidt, Andreas; Kindermann, Markus Karl  
 CS Ernst-Moritz-Arndt-Universitaet Greifswald, Greifswald, D-17487, Germany  
 SO Journal of Organic Chemistry (1998), 63(14), 4636-4644  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 AB A novel tandem nucleophilic displacement reaction on 2,4,5,6-tetrachloropyrimidine leads to mol's. with two delocalized pos. and one delocalized neg. charge, which comprise a common  $\pi$ -electron system, plus one external anion. Thus, treatment of 2,4,5,6-tetrachloropyrimidine with an excess of heteroarom. nucleophiles such as 4-(dimethylamino)pyridine, 4-(pyrrolidin-1-yl)pyridine, and 1-methylimidazole, resp., followed by the addition of water formed the tripolar bis(pyridinium)pyrimidin-4-olates I ( $R = Me2N$ , 1-pyrrolidinyl;  $R1 = O-$ ;  $X = Cl$ ,  $BPh4$ , I) and bis(methylimidazolium)pyrimidin-4-olates II ( $R1 = O-$ ;  $X = Cl$ ,  $BPh4$ , I). Addition of anhydrous alcs. furnished the O-alkylated dicationic species I ( $R = Me2N$ , 1-pyrrolidinyl;  $R1 = MeO$ ,  $EtO$ ,  $Me2CHO$ ;  $X = BPh4$ ) and II ( $R1 = MeO$ ,  $EtO$ ,  $Me2CHO$ ;  $X = BPh4$ ). We contrast the spectroscopic features of the monocationic I and II ( $R1 = O-$ ) and the dicationic I and II ( $R1 = MeO$ ,  $EtO$ ,  $Me2CHO$ ) and performed a conformational study on I ( $R = Me2N$ ;  $R1 = O-$ ;  $X = \text{no anion}$ ) (PM3). The HOMO/LUMO profile of I ( $R = Me2N$ ;  $R1 = O-$ ;  $X = \text{no anion}$ ) was calculated to evaluate our classification of I and II as cross-conjugated mesomeric betaine (CCMB) derivs.  
 IT 210833-67-3  
 RL: PRP (Properties)  
 (conformational anal. and MO calcns. on the  
 [di(4-dimethylamino)pyridinium]pyrimidinium cation)  
 RN 210833-67-3 CAPLUS  
 CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyl)bis[4-(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

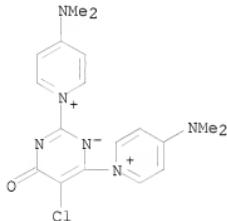


IT 210833-66-2P 210833-68-4P 210833-69-5P  
 210833-70-8P 210833-72-0P 210833-73-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of bis(pyridinium)pyrimidinolates and  
 bis(imidazolium)pyrimidinolates as tripolar mesoionic compds.)

RN 210833-66-2 CAPLUS

CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyil)bis[4-(dimethylamino)-, inner salt, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

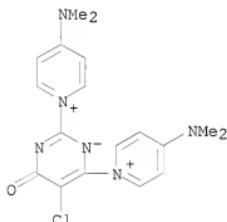
RN 210833-68-4 CAPLUS

CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyil)bis[4-(dimethylamino)-, inner salt, tetraphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 210833-67-3

CMF C18 H20 Cl N6 O

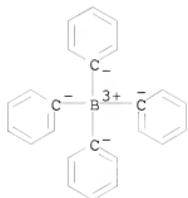


CM 2

CRN 4358-26-3

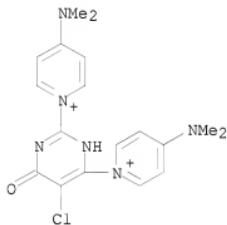
CMF C24 H20 B

CCI CCS



RN 210833-69-5 CAPLUS

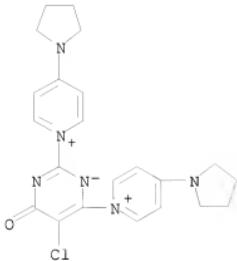
CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyl)bis[4-(dimethylamino)-, diiodide (9CI) (CA INDEX NAME)



●2 I-

RN 210833-70-8 CAPLUS

CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyl)bis[4-(1-pyrrolidinyl)-, inner salt, chloride (9CI) (CA INDEX NAME)

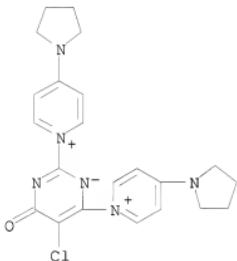


● Cl-

RN 210833-72-0 CAPLUS  
 CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyil)bis[4-(1-pyrrolidinyl)-, inner salt, tetraphenylborate(1-) (9CI) (CA INDEX NAME)

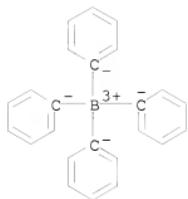
CM 1

CRN 210833-71-9  
 CMF C22 H24 Cl N6 O



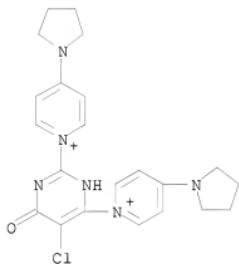
CM 2

CRN 4358-26-3  
 CMF C24 H20 B  
 CCI CCS



RN 210833-73-1 CAPLUS

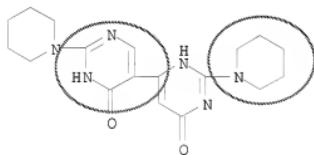
CN Pyridinium, 1,1'-(5-chloro-1,6-dihydro-6-oxo-2,4-pyrimidinediyl)bis[4-(1-pyrrolidinyl)-, diiodide (9CI) (CA INDEX NAME)



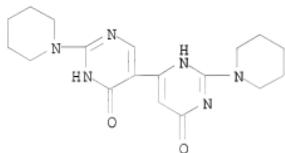
● 2 I-

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 1977:189847 CAPLUS  
 DN 86:189847  
 OREF 86:29777a,29780a  
 TI Synthesis with pyrimidinyllithium compounds and properties of a series of 4,4'- and 4,5'-bipyrimidine derivatives  
 AU Strekowski, Lucjan  
 CS Univ. Adama Mickiewicza, Poznan, Pol.  
 SO Seria Chemia (Uniwersytet im. Adama Mickiewicza w Poznaniu) (1976), 20,  
 114 pp.  
 CODEN: SCUCDH; ISSN: 0554-8241  
 DT Journal  
 LA Polish  
 AB 4,5'-Bipyrimidines with methoxy or methylthio substituents at positions 4' and 6 were prepared. In a typical run, a 5-bromo-4-methoxypyrimidine was treated with .apprx.0.6-0.8 molar equivalent BuLi, kept, then quenched with H<sub>2</sub>O. 5-Bromo-2,4-bis(alkylthio)pyrimidines and 5-bromo-2,4-di-tert-butoxypyrimidine (I) in THF gave rise to mixts. of 4,4'- and 4,5'-bipyrimidine, but in Et<sub>2</sub>O I gave rise to the 4,5'-bipyrimidine only. The bipyrimidines can be formed through the nucleophilic addition of pyrimidinyl-lithiums to 4,5-didehydropyrimidines or to the N(1)-C(6) azomethine bond in the pyrimidine ring of the substrates. 5-Bromo-2,4-dichloropyrimidine on treatment with controlled quantities of nucleophiles, such as alkoxide and alkylmercaptide anions and secondary amines, could exchange its Cl at position 4 with high selectivity. A nucleophilic displacement of the Cl at position 2 in the products gave rise to 5-bromopyrimidines with various substituents at positions 2 and 4. Mass spectra of the pyrimidine derivs. were reported. Some of the compds. showed unusual decomposition patterns of the mol. ions.  
 IT 59549-60-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 59549-60-9 CAPLUS  
 CN [4,5'-Bipyrimidine]-4',6(1H,3'H)-dione, 2,2'-di-1-piperidinyl- (CA INDEX NAME)



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 AN 1976:421278 CAPLUS  
 DN 85:21278  
 OREF 85:3477a,3480a  
 TI Syntheses with pyrimidine-lithium compounds. III. Bipyrimidines from  
 2,4-disubstituted 5-bromopyrimidines  
 AU Strekowski, Lucjan  
 CS Inst. Chem., Adam Mickiewicz Univ., Poznan, Pol.  
 SO Bulletin de l'Academie Polonaise des Sciences, Serie des Sciences  
 Chimiques (1976), 24(1), 17-28  
 CODEN: BAPCAQ; ISSN: 0001-4095  
 DT Journal  
 LA English  
 OS CASREACT 85:21278  
 AB The bipyrimidines I (R = Me<sub>2</sub>N, piperidino, and MeO, R<sub>1</sub> = MeO; R = MeO, R<sub>1</sub>  
 = MeS) were prepared by treating II with BuLi in THF. II (R = R<sub>1</sub> = Me<sub>3</sub>CO)  
 with BuLi in THF gave I and the 4,4'-bipyridine derivs., but in Et<sub>2</sub>O gave  
 only I.  
 IT 59549-60-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 59549-60-9 CAPLUS  
 CN [4,5'-Bipyrimidine]-4',6(1H,3'H)-dione, 2,2'-di-1-piperidinyl- (CA INDEX  
 NAME)



10/538,766

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
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